

**ROLE OF YOGA, DIET AND LIFESTYLE MODIFICATION IN LOW BACK PAIN**\*<sup>1</sup>Dr. Sonia, BAMS MD and <sup>2</sup>Dr. Rashma S., BAMS MD<sup>1</sup>Associate Professor, <sup>2</sup>Assistant Professor

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**ABSTRACT**

Low back pain (LBP) is experienced in 60%–80% of adults at some point in their lifetime. LBP is an emerging problem in adolescents, with an incidence that is the highest in the third decade of life worldwide. Affecting Men & Women equally, it is the most common cause of job-related disability and a leading contributor to missed work days. Various risk factors such as obesity, smoking, family history, stress, and exercise have been described in the literature. These risk factors can result in the progression from an acute LBP episode to a chronic problem. Yoga is advisable for low back pain and recent studies in people with mild to moderate chronic low back pain suggest that a carefully adapted set of yoga postures may help reduce pain and improve the ability to walk and move. Major dietary cause of back pain includes excessive caffeine, alcohol, and sugar—all things that increase cortisol levels. When there's excess cortisol in the body, connective tissue can get inflamed, causing pain. So, diet modification also plays an important role in prevention of LBP. Due to changed in lifestyle the prevalence rate of LBP is increased in past decade and so related to which in ayurveda we get references in classics regarding specific regimens to be adopted like Dinacharya and Ritucharya which can be incorporated daily for prevention of LBP. Hence the present study is being taken to have a literary review on combined effect of yoga, diet and lifestyle modification on LBP.

**KEYWORDS:** Low back pain (LBP), Yoga, Diet, Life style modification.**INTRODUCTION**

Low Back Pain, a chronic condition and most common pain disorder which is characterized by dull or sharp pain in the lower back it may be also associated with burning, stiffness etc. Pain in the lower back restricts the activity, reduces work capacity, quantity of enjoyment of everyday living and turns daily life into a misery. About 40% to 80% of general population in life time in India suffers from Low Back Pain due to several stressful factors seen in their professional or social life and also due to wrong postural habits. Low back pain can be medically and economically devastating and is the number one cause for disability in patients younger than forty-five years of age and number three cause for disability in patients older than forty-five years of age.<sup>[1]</sup>

In Ayurveda the pathogenesis of low back pain can be understood as due to nidanakara ahara & vihara the vata gets vitiated and takes ashraya in kati pradesha which leads to the shoshana of the shleshaka kapha present in the sandhis there. The shoshana of shleshaka kapha leads to the hampered functioning of the joints preventing all the movements at the kati pradesha. Thus, the movements at the Lumbo-sacral region like flexion, extension, lateral flexion and rotation are hampered either completely or partially. The degree of affection

varies depending on the presentation of etiological factors, such as the site of the structures injured and the extent of injury and duration.

Hence a Holistic approach toward treatment of the disease is need of the hour. Diseases in present era are more related to the changing life style, occupation and the eating habit. A simple disease like low back pain if not treated properly lead to a lot of complications. Hence modification in lifestyle along with diet in low back pain incorporated with yoga practice will not only cure the disease but also helps in preventing the reoccurrence of the same. Hence in the present paper a detailed reviewed study is done on the combined effects of yoga, diet and lifestyle modification in low back pain.

**Yoga in Low back pain:** - Yoga has been proven to be a safe and effective way alleviating low back pain and help prevent ongoing problems. Yoga helps increase strength in very specific muscles and muscle groups. Yoga incorporates stretching and relaxation, which reduces tension in stress-carrying muscles. For people with lower back pain, stretching is very important. For example, stretching the hamstring muscles (in the back of the thigh) helps expand the motion in the pelvis, decreasing stress across the lower back. In addition, stretching with yoga increases blood flow,

allowing nutrients to flow in, toxins to flow out, and overall nourishment of the muscles and soft tissues in the lower back. So, in low back pain a sequential form of yoga has to be advised for the patients so as to strengthen the back muscles as well as relieving the back pain. Among the innumerable yoga asanas, there are some, which work specially on spine. These asanas help in relaxing the tight muscles, reducing the tension and strengthening them. Yoga practices these asanas along with pranayama, correcting the vertebral curvatures, with respective angles, strengthening thoracic and abdominal cavities along with respiratory muscles supporting the maintenance of proper posture.<sup>[2]</sup>

Analyzing papers reviewed in this article, the below listed yoga postures have been identified as common specific asanas designated to reduce spinal pain (back and neck) consistently mentioned in the studies which revealed the details of intervention program:

- Tadasana – Mountain pose and various arm/shoulder positions
- Ardha Uttanasana – Half forward bend to wall or ledge
- Chair Bharadvajasana – Seated chair twist
- Adho Mukho Virasana – Downward-facing hero pose
- Adho Mukha Svanasana – Downward-facing dog pose
- Utthita Trikonasana – Extended triangle pose
- Virabhadrasana II – Warrior pose II
- Utthita Parsvakonasana – Extended side angle pose
- Prasarita Padottanasana – Intense leg stretch
- Supta Padangustasana – Reclining big toe (and variations)
- Prone Savasana – Lying prone corpse pose (with weights)

- Supta Pavanamuktasana – Lying both knees to chest pose
- Supta Savasana – Lying supine corpse pose.

**Diet in Low back pain:-** Recent studies have shown a number of foods are pro-inflammatory. For example, foods high in trans fats, saturated fats, sugars and white flour can trigger inflammation through a complex series of biochemical and hormonal processes. Consequently, if you do suffer from ongoing back pain it is sensible to reduce the amount of pro-inflammatory foods you eat. Things to cut down on:

- Red meat
- Highly processed foods and foods with added sugars
- White bread, pasta and rice
- Whole-fat dairy
- Sugary drinks and snacks
- Fried foods

**Eat Your Veggies to Fight Back Pain** A mostly plant-based diet that includes such things as flax and chia seeds, is probably your best bet to avoid inflammation, especially when eaten in combination with omega-3-rich coldwater fish like salmon, mackerel, sardines, herring, black cod, tuna, and trout.

Other foods to avoid? Processed foods, fast foods, and saturated fats. All of these fuel inflammation. This includes white bread, pasta, rice, sugary drinks and snacks, fried foods, and anything with partially hydrogenated oil in the ingredients, often found in preservative-packed products with a long shelf-life, such as chips, crackers, and pastries.

Natural food sources for calcium include yogurt, milk, and cheese, as well as leafy green vegetables. If you're not able to obtain enough calcium from your diet

**Table 1: Pathya in Kati Shoola.**<sup>[3]</sup>

Ahara	
Rasas	Madhura-Amla-Lavana
Shukadhanya	Nava Godhuma, Nava Shali, Rakta Shali, Shashtika Shali
Shimbi Varga	Nava Tila, Masha, Kulatha
Shaka Varga	Patola, Shigru, Vartaka, Lashuna
Mamsa Varga	Ushtra, Go, Varaha, Mahisha, Magura, Bheka, Nakula, Chataka, Kukkuta, Tittira, Kurma
Jala Varga	Ushnajala, Shrithasheetajala, Narikelajala
Dugdhavarga	Go, Aja, Dadhi, Ghritha, Kilata, Kurchika
Mutravarga	Gomutra
Madyavarga	Dhanyamla, Sura
Snehavarga	Ghritha, Tila, Vasa, Majja
Present day food stuffs	Orange juice, carrot, all fibrous fruits and Vegetables
Vihara	
Veshtana, Trasana, Mardana, Snana, Bhushayya	
Present day & activities: Physiotherapy exercise, Yoga Asana, Steam bath	

**Table 2: Apathya In Kati Shoola.<sup>[4]</sup>**

Ahara	
Rasas	Katu, Tikta, Kashaya
Shukadhanya	Truna, Kangu, Koradusha, Neevara, Shyamaka
Shimbivarga	Rajamasha, Nishpava, Mudga, Kalaya
Phalavarga	Jambu, Udumbura, Kramuka, Tinduka
Mamsa varga	Sushka mamsa, Kapota, ParaVata
Jala varga	Sheetajala
Dugdhavarga	Gardabha
Present day food stuffs	Fast food, cold beverages, liquor
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Manasika:	Chinta, Shoka, Bhaya

**Preventing Lower Back Pain with lifestyle changes**

You can reduce the chances that you experience lower back pain by making these positive lifestyle changes.

1. Eat healthfully so you keep your body weight within a healthy range.
2. Get regular exercise to keep your back muscles fit and flexible.
3. Avoid prolonged sitting.
4. When you do sit, maintain good posture.
5. Use proper techniques for lifting (lift with your legs rather than your back).
6. Avoid frequent bending and twisting. Especially avoid bending, twisting and lifting at the same time (like shoveling snow).
7. Avoid situations where your spine is vibrated for long periods of time.
8. Get enough sleep each day.
9. Stop smoking.
10. If you have depression and/or anxiety, visit with your health care clinician about ways to manage it.

In Ayurvedic concept of dinacharya & ritucharya can also be in corporated along with diet & yoga in prevention of low back pain. In dinacharya,<sup>[5]</sup> specifically for low back pain Abhyanga specifically with vatahara taila, vyayama specially the specific yoga for low back pain along with that other exercises, chankramana and danda dharana. If a person follows the proper ritucharya of changing ahara and vihara based on the season then accumulation of the morbid doshas can be avoided. As in low back pain vata is the main dosha involved so the accordingly the ritushodhana,<sup>[6]</sup> specially basti can be advised as it acts over vata dosha and helps in maintaining the balanced state of vata dosha.

**CONCLUSION**

Low back pain is one of the predominant disease affecting a large population in India, which is mainly due to the imbalance of vata dosha as an outcome of bad food habits, lack of exercise and the lifestyle. Hence an integrated approach is needed to prevent this condition, in that regards one has to follow daily yoga practice to as to strengthen the back muscles as well as relieving the back pain along with that to healthy food habits and proper lifestyle and incorporating the principles of ayurveda in form of dinacharya and ritucharya.

**REFERENCES**

1. Epidemiology of Low Back Pain in Indian Population: A Review, Supreet Bindra<sup>1</sup>, Sinha A.G.K., Benjamin A, International Journal of Basic and Applied Medical Sciences, 2015; 5(1): 166-176.
2. Bhaishajya ratnavali, Govinda Das Sena, Chapter 26, Varanasi; Chaukhambha Sanskrit Series, 2002.
3. Bhaishajya ratnavali, Govinda Das Sena, Chapter 26, Varanasi; Chaukhambha Sanskrit Series, 2002.
4. Ross A, Friedmann E, Bevans M, Thomas S. Frequency of yoga practice predicts health: Results of a national survey of yoga practitioners. Evid Based Complement Alternat Med, 2012; 2012: 9832.
5. Charaka Samhita, Agnivesha, Sutrasthana chapter-25, shloka-40, volume- I, edited by Murthy Srikantha. K.R; Chaukhambha Surbharathi prakashana, Varanasi (India), 372.
6. Astanga Hridaya, Sutra Sthana 4/35, with Vidyotini commentary, Choukhambha publication, Varanasi, edition, 2000.