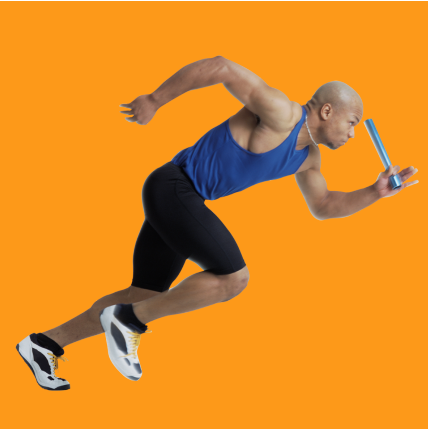




**Exercise**



**&back**

**pain**

# + Common questions

- Which exercises are the best for back pain?
- Are there any specific stretches which are most beneficial?
- What sports should I do?
- What sports are not recommended for back troubles?
- Why are yoga and pilates good?
- What are the specific back exercises?



# + Which sports contribute to back pain?

## **Exercises and sports with higher risk**

- Fast bowling in cricket
- Gymnastics
- Rowing
- Swimming
- Wrestling & rugby
- Golf
- Dancing (ballet)

## **Exercises recommended for back pain**

- Any gentle aerobic activity which is not painful and which you enjoy
- Pilates
- Swimming, cycling, running
- Core training
- Specific strengthening exercises

# + Back pain in general..

- Around 80% of all people will back pain at some point in their lives whether sporting or not
- The vast majority of back pain is nothing serious
- Often it is just about changing movement patterns, training certain muscles and not forgetting about the impact of your mind and thinking on pain
- Doctors and therapists cannot often tell what exactly is hurting because back pain is complex
- Pain is a very subjective feeling influenced by factors like stress, lifestyle, activities, job satisfaction, negative emotions, family situation, relationships
- These cannot be ignored as they can be real obstacles, especially if you have tried many physical treatments with no success

# + Which exercises are best for back pain

- Lots of research tried to identify which exercises are best
- There is generally no single exercise which is better
- The key is to keep active and do what you can do comfortably
- Common exercises prescribed: yoga, pilates, stretching, cycling, walking, swimming
- Because it is difficult to determine which one structure is hurting, we must focus on function and what limitations one has, further this is addressed through a rehabilitation program and specific exercises



# + Yoga and pilates

- These are often recommended when recovering from an episode and to maintain well controlled and balanced core
- Yoga and pilates focus on **posture, breathing, control, stability and flexibility**
- All of these are important for training the muscles and control around the back and the front as these muscles interact during all activities (such as lifting, twisting and turning) and also during exercise & sports
- **Alignment**, as one of the mains aim of yoga and pilates, focuses on the whole body from head to toe and teaches one to become more aware of his body position and posture
- Mindfulness and breathing during these gentle workout can have a great **relaxing, calming effect** as well as **reducing stress and tension** which often contribute to feeling pain

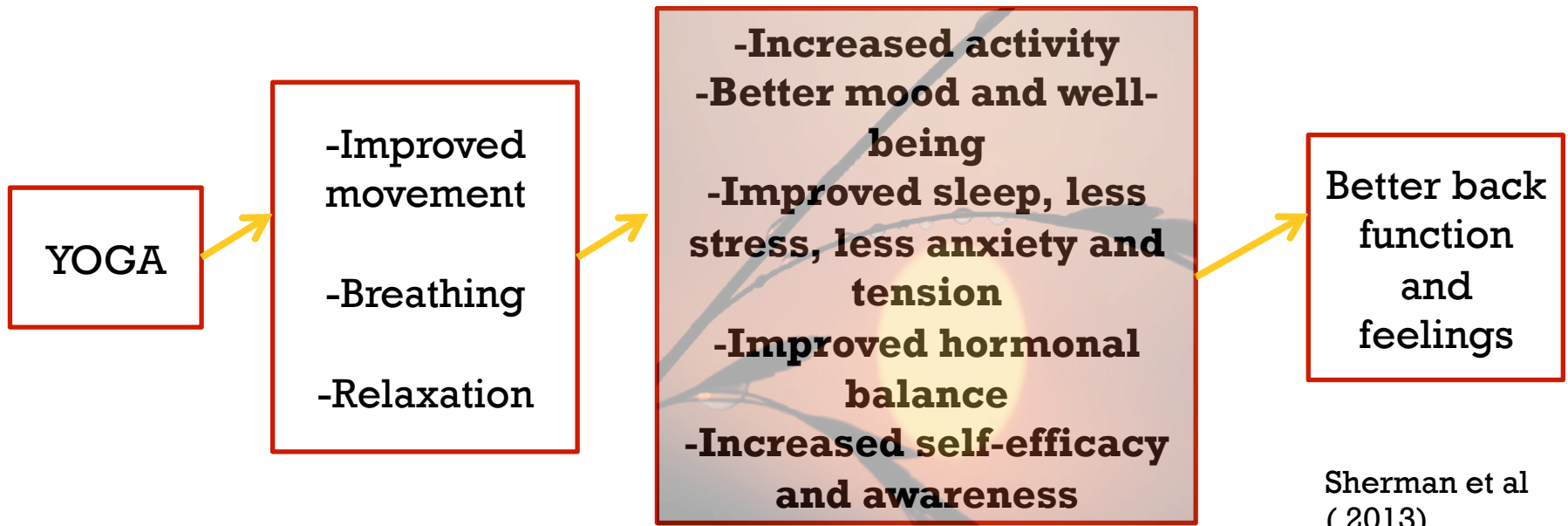




# What does science say about yoga?



- **Positive effects of yoga** extend beyond physical effects and it is known that yoga is a great relaxing exercise that makes you feel good, less stressed and that is a good thing. Most of us have various reasons for stress and tension and it is important to find a way to relax, exercise, de-stress and improve well-being.



Sherman et al  
(2013)

# + What does science say?

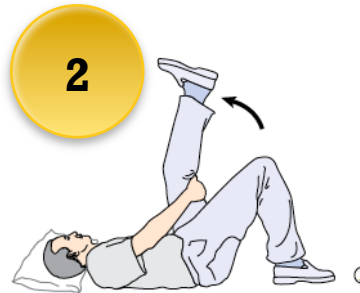


- **Pilates vs cycling for long-term back pain:** Pilates use specific trunk strengthening exercises and these have been shown to be better than stationary cycling if both are performed regularly for 8 weeks but only in terms of disability and pain
- When the same was measured after 6 months, these both groups showed the same results and this could mean that it doesn't matter whether you do pilates or cycle, you will still get the same benefits (Marshall et al 2013)
- **Intense yoga program vs standard exercise:** This study found that 7 days of intense yoga in people with chronic lbp reduced anxiety, pain, depression and improves spinal mobility better than when doing normal physiotherapy exercises (Tekur et al, 2012)



# + Specific back exercises

- Many informative leaflets have been produced to show you which exercises and stretches are commonly carried out
- Download these:
  - 1) Arthritis Research. Back pain
  - <http://www.arthritisresearchuk.org>
  - 2) Back Care Exercises
  - <http://www.backcare.org.uk>



## Simple exercises



NB: Upper knee should be directly above lower knee.



### Back stretch

Lie on your back, hands above your head. Bend your knees and roll them slowly to one side, keeping your feet on the floor. Hold for 10 seconds. Repeat 3 times on each side.



### Deep Lunge

Kneel on one knee, the other foot in front. Facing forwards, lift the back knee up. Hold for 5 seconds. Repeat 3 times on each side.



### One-leg stand (front)

Holding onto something for support if needed, bend one leg up behind you. Hold for 5 seconds. Repeat 3 times on each side.



### Pelvic tilt

Lie down with your knees bent. Tighten your stomach muscles, flattening your back against the floor. Hold for 5 seconds. Repeat 5 times.

# + Summary

- There is no single exercise that will guarantee improvements in back pain
- Every person is different and needs a different approach
- Many people benefit from yoga and pilates which work on specific core exercises and these not only alleviate pain but they also have a positive impact on mood, relaxation, stress, sleep, self-efficacy, body awareness and more
- Other exercises which won't do any harm are cycling, walking, swimming but these will not be suitable and pain-free for everyone
- The most important thing is to be active and do a sports or exercise that you enjoy and that makes you feel good! No one should decide that for you, that is your treat





# References



- Tekur et al (2012). A comprehensive yoga programs improves pain, anxiety and depression in chronic low back pain patients more than exercise: An RCT. *Complementary Therapies in Medicine*. 20: 107-118.
- Sherman et al (2013) Mediators of Yoga and Stretching for chronic low back pain.
- Saper et al (2013) Comparing Once- versus Twice-Weekly Yoga Classes for Chronic Low Back Pain in Predominantly Low Income Minorities: A Randomized Dosing Trial.
- Marshallm et al (2013) Pilates exercise or stationary cycling for chronic non-specific low back pain: does it matter? A randomized controlled trial with 6-month follow-up. *Spine*. Published ahead of print.