Imprint

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Commercial Register: Local Court Leipzig, HRB 42755 (Handelsregister: Amtsgericht Leipzig, HRB 42755)
Managing Director: Rico Saage (Geschäftsführer)
VAT ID Number: DE369527893 (USt-IdNr.)

Publisher: Saage Media GmbH
Publication: 02.2025
Cover Design: Saage Media GmbH
ISBN Softcover (en): 978-3-384-52224-5
ISBN Ebook (en): 978-3-384-52225-2

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The information contained in this book regarding back pain, exercises, and therapies has been carefully researched; however, it cannot serve as a substitute for professional medical advice, diagnosis, or treatment. Before starting any exercise program or therapy, you should definitely consult your doctor, physiotherapist, or another qualified health professional. In cases of acute or chronic back pain, neurological symptoms, or after injuries, medical evaluation is essential. The exercises and therapeutic approaches presented may lead to injuries or exacerbate symptoms if performed incorrectly or in the presence of certain pre-existing conditions. The techniques and exercises described were compiled to the best of our knowledge and belief based on current scientific findings at the time of publication. New research results may lead to altered recommendations. All exercise instructions, therapy suggestions, and other content of this book are protected by copyright. Use in other publications or media requires explicit written permission. The mentioned aids, therapeutic devices, and medications may be trademarks of their respective owners. Detailed references to scientific studies and literature can be found in the appendix of the book.

Bendis Saage

Back Pain Relief: Natural Healing Guide for Your Spine

A Practical Approach to Healing Back Pain Through Exercise, Posture Correction, and Effective Treatment Methods

101 Sources
41 Diagrams
24 Images
7 Illustrations

Dear readers,

We sincerely thank you for choosing this book. With your choice, you have not only given us your trust but also a part of your valuable time. We truly appreciate that.

Back pain affects about 80% of all people at least once in their lives—often with significant impacts on daily life and quality of life. This specialized book offers a well-founded insight into the complex relationships of lumbar back disorders and presents scientifically based methods for relief and prevention. From the origins to psychosomatic factors and targeted exercise programs, all relevant aspects are illuminated. With practical workouts, therapeutic approaches, and everyday strategies, the book enables a self-determined handling of back problems. The methods presented range from acute treatment to long-term stabilization of the spine. The combination of medical expertise and practical exercise instructions makes this book a valuable companion for anyone who wants to actively care for their back. Take your back health into your own hands now—with well-founded insights and proven exercises for a pain-free daily life.

This guide provides you with easy-to-understand and practical information on a complex topic. Thanks to self-developed digital tools that also use neural networks, we were able to conduct extensive research. The content has been optimally structured and developed up to the final version to provide you with a well-founded and easily accessible overview. The result: You get a comprehensive insight and benefit from clear explanations and illustrative examples. The visual design has also been optimized through this advanced method so that you can quickly grasp and use the information.

We strive for the highest accuracy but are grateful for any indication of possible errors. Visit our website to find the latest corrections and additions to this book. These will also be incorporated in future editions.

We hope you enjoy reading and discover new things! If you have any suggestions, criticism or questions, we look forward to your feedback. Only through active exchange with you, the readers, can future editions and works become even better. Stay curious!

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Quick access to knowledge

To ensure an optimal reading experience, we would like to familiarize you with the key features of this book:

- **Modular Structure:** Each chapter is self-contained and can be read independently of the others.
- **Thorough Research:** All chapters are based on thorough research and are supported by scientific references. The data shown in the diagrams serves for better visualization and is based on assumptions, not on the data provided in the sources. A comprehensive list of sources and image credits can be found in the appendix.
- **Clear Terminology:** Underlined technical terms are explained in the glossary.
- **Chapter Summaries:** At the end of each chapter, you'll find concise summaries that give you an overview of the key points.
- **Concrete Recommendations:** Each subchapter concludes with a list of specific advice to help you put what you've learned into practice.

Additional bonus materials on our website

We plan to provide the following exclusive materials on our website:

- Bonus content and additional chapters
- A compact overall summary
- An audio drama version. (In planning)

The website is currently under construction.

www.SaageBooks.com/back_pain-bonus-FMORLL

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1. Causes and Development

Why does our back trouble us precisely when we need it the most? The complex architecture of our spine makes it both robust and susceptible to disturbances. Numerous factors, from daily posture to mental state, influence our back. Modern lifestyles pose particular challenges to our musculoskeletal system. In this chapter, we will decipher the hidden mechanisms that can lead to back pain.

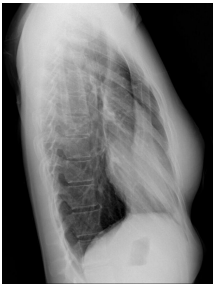
1. 1 Physical Strain

Physical strain plays a crucial role in the development of back pain. Everyday poor posture, lack of movement, and overexertion from heavy lifting impair spinal health and increase the risk of discomfort. These strains affect not only the muscles, ligaments, and intervertebral discs but also the overall body mechanics, potentially leading to structural changes in the long term. Occupational activities and our lifestyle significantly influence the types of strain our back is subjected to. The consequences range from mild tension to chronic pain and mobility restrictions, which can considerably diminish quality of life. Understand the causes and effectively prevent back pain – read on!

> *Permanent poor posture, lack of movement, and overexertion damage the spine and lead to back pain. Unilateral loads, improper lifting, and prolonged sitting increase the risk. Active movement, correct lifting techniques, and ergonomic workplaces help prevent discomfort.*

Postural Misalignments in Daily Life

Postural misalignments in daily life significantly contribute to the development of back pain. Prolonged sitting, often in a hunched position in front of the screen, shortens the muscles on the front of the body while weakening the back muscles [s1]. This persistent muscular imbalance leads to altered spinal statics and can cause pain. Poor posture while standing also leads to problems: A hollow back (lordosis), a rounded back (kyphosis), or a flat back can unfavorably distribute the load on the spine and cause discomfort in the lumbar region [s2]. Scoliosis, a lateral curvature of the spine, can also lead to back pain [s2]. In the long term, these postural misalignments can even result in structural changes and injuries to the lumbar spine [s2]. Various factors influence our posture, including anatomical peculiarities, aging processes, diseases, occupational activities, and even our emotional state [s2]. At the workplace, unfavorable body postures can exacerbate existing complaints or cause new ones [s3]. For example, if tables and chairs are not adjusted to individual body measurements, this can lead to postural misalignments and subsequently to musculoskeletal complaints [s3]. Height-adjustable desks offer the possibility to alternate between sitting and standing, thereby reducing the strain on the back [s3]. Not only the posture itself but also the way we move is crucial. Rigid, slow movements and protective postures intensify pain and further restrict mobility [s1]. The fear of movement and negative thoughts about one's own posture can additionally exacerbate this vicious cycle [s1].



Kyphosis [i1]

Good to know

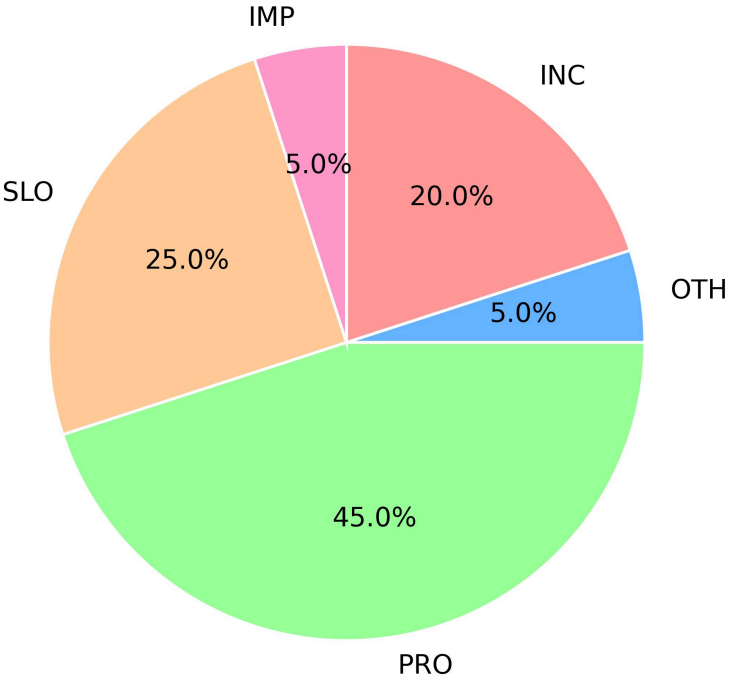
Muscular Imbalance
An imbalance in muscle strength, where certain muscles are excessively strong or weak compared to their antagonists. This can lead to postural misalignments, pain, and limitations in movement, particularly in the back.

Musculoskeletal Complaints
Complaints affecting muscles, bones, joints, tendons, ligaments, and nerves. They can cause pain, stiffness, swelling, and limitations in movement.

Protective Posture
A body posture adopted to avoid or alleviate pain. However, it can lead to further problems in the long term, as it weakens the muscles and shifts the load to other areas of the body.

Common Posture Mistakes

Distribution of posture-related back pain causes.



IMP: Standing improperly

INC: Incorrect Lifting

OTH: Other factors

PRO: Prolonged Sitting

SLO: Slouching/Hunching

The largest contributing factor to back pain is prolonged sitting, highlighting the importance of regular breaks and ergonomic workspaces. While slouching and incorrect lifting techniques also contribute significantly, they are less prevalent than the impact of extended sitting. Addressing these three key areas could significantly reduce the occurrence of back pain.

Lack of Exercise and Consequences

Inactivity negatively affects the body and contributes to various health problems, including back pain. Physical inactivity leads to impaired blood circulation, which reduces the supply of nutrients and oxygen to the muscles and intervertebral discs [s4]. This can result in weakened back muscles and decreased elasticity of the intervertebral discs, making the spine more susceptible to injuries and pain. An inactive lifestyle also increases the risk of osteoporosis, a condition that weakens bones and makes them more prone to fractures [s4]. In particular, the vertebrae of the spine are affected by osteoporosis, which can lead to vertebral fractures and chronic back pain. Additionally, lack of exercise can lead to arthritis, a joint inflammation that can also cause back pain [s4]. Besides the direct physical effects, inactivity also impacts mental well-being. A decreased self-esteem and reduced quality of life are common consequences of lack of exercise [s4]. These psychological factors can amplify pain perception and further reduce motivation for physical activity, creating a vicious cycle of inactivity and pain [s5]. Chronic pain, which arises or is exacerbated by lack of exercise, restricts mobility and reduces participation in social and professional activities [s6]. This leads to social isolation and can promote depression [s6] [s7]. Sedentary activities, such as working at a computer for hours, increase the risk of depression and worsen bone density, which in turn raises the risk of osteoporosis [s7]. The duration of sitting correlates directly with an increased mortality risk and the likelihood of developing various diseases [s7]. The longer one sits, the more severe the negative health consequences. While rest was previously recommended as therapy for back pain, recent studies demonstrate the positive effects of movement and physical activity in alleviating pain [s8]. Regular exercise improves physical function and reduces pain perception, especially in cases of chronic pain [s5]. The integration of exercise into the treatment of chronic pain is recommended in national and international guidelines [s5]. An exercise program should be tailored to individual needs and pain levels. Start with light activities such as walking and gradually increase intensity