

offmax®

01

Aerospace Spinal

Protection: 3rd generation product
of technological iteration

02

Blue Fit Exclusive Patent

Three Core Spinal Protection Technology

03

Blue Fit Spinal Protection Center

Six spinal protection functions

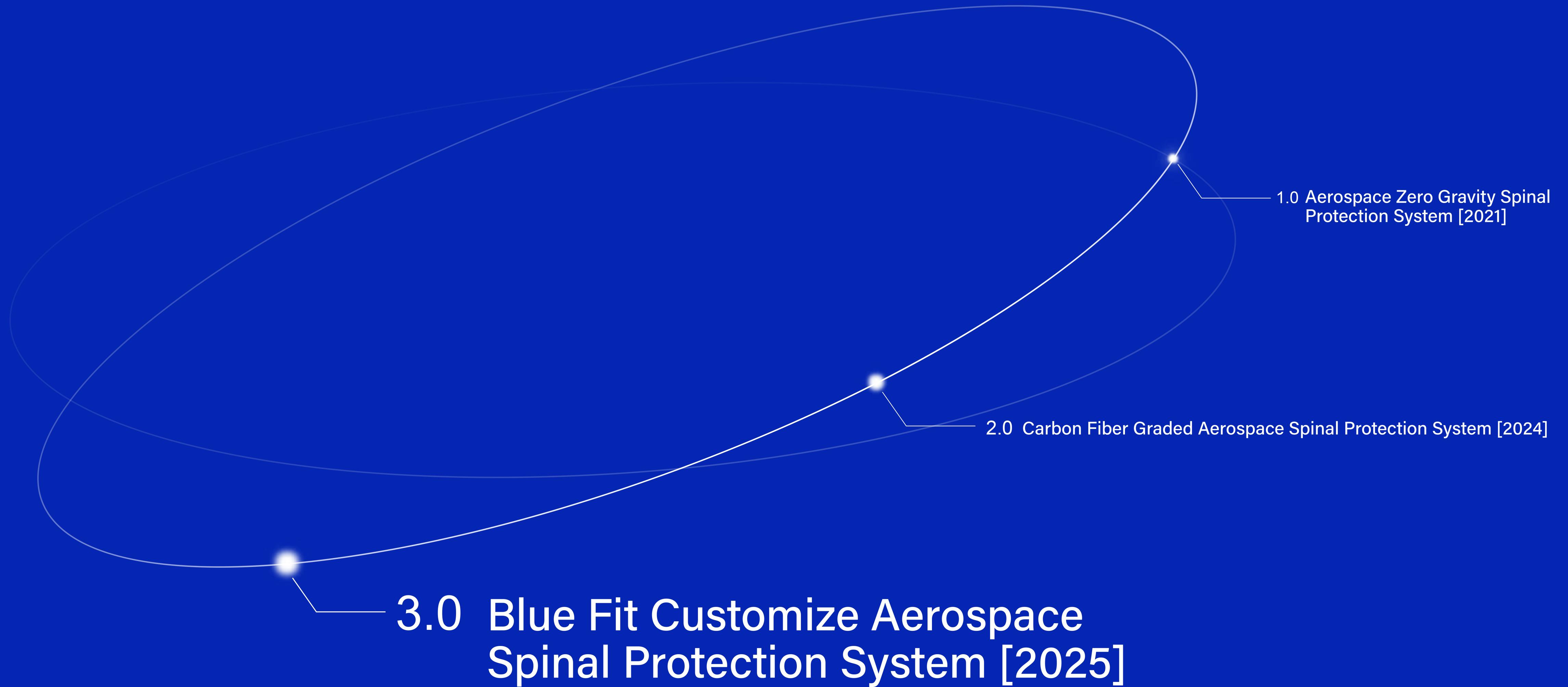
DESIGN FOR SPECIAL POPULATIONS

Participated in the development of the "escort chair" for astronauts returning from the spacecraft in 2021

Provided full spinal support for the return of astronauts from Shenzhou 13 to Shenzhou 19, seven times



AEROSPACE SPINAL PROTECTION · THREE ITERATIONS





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Increase anti deformation carbon fibers to enhance the neutral position protection of the spine. Provide three different levels of spine for different physiological states Column protection; Combined with a zero gravity chassis, it assists in returning the spine to neutral position while restoring positive sequence control of the nervous system, allowing for movement,activate the spine.

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The latest Blue Bone 6-dimensional spinal support system can quickly adjust the strength of spinal support by fine-tuning or replacing different support modules. Overtime work, sports and entertainment can all change the condition of our spine. We don't need to replace the seat, we can just adjust it by replacing the module, different comfort and spine protection needs can be quickly met. Realize longer lifecycle companionship.



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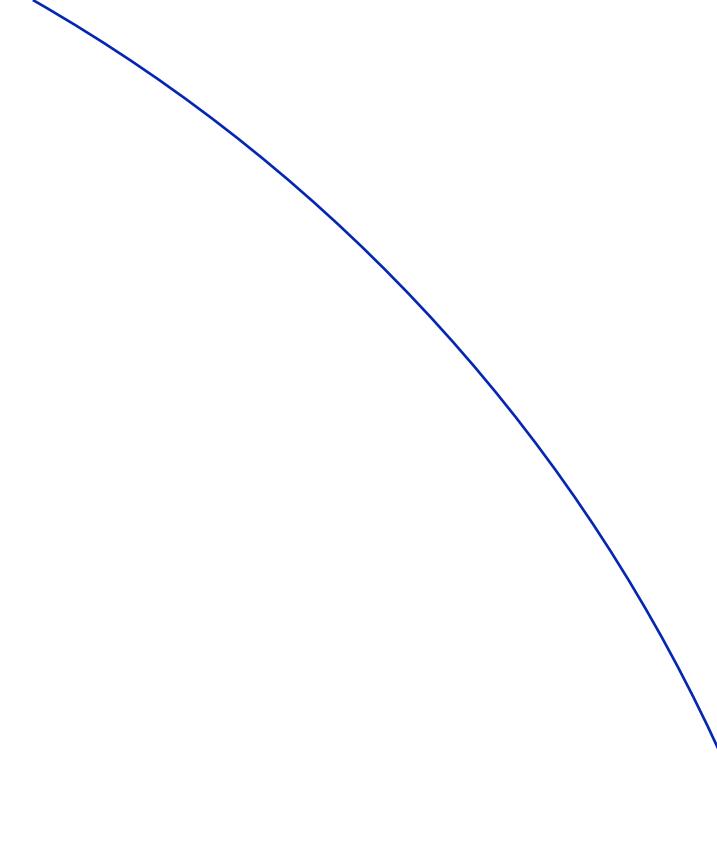
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BLUE FIT EXCLUSIVE PATENT THREE CORE SPINAL PROTECTION TECHNOLOGIES

- 01 ZERO-GRAVITY SPINAL PROTECTION MECHANISM
- 02 BLUE FIT 6-DIMENSIONAL SPINAL SUPPORT SYSTEM
- 03 META NECKREST™

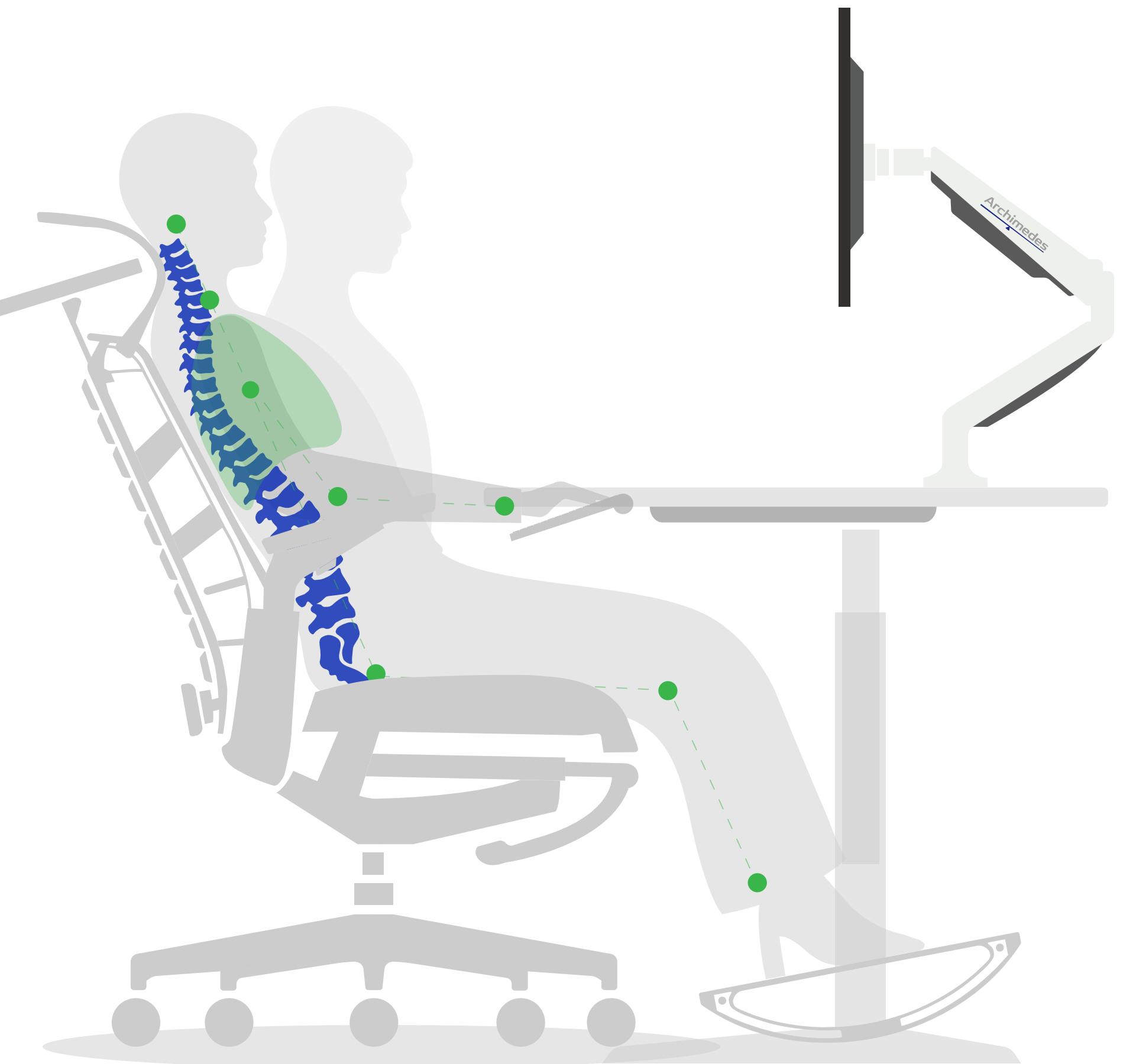
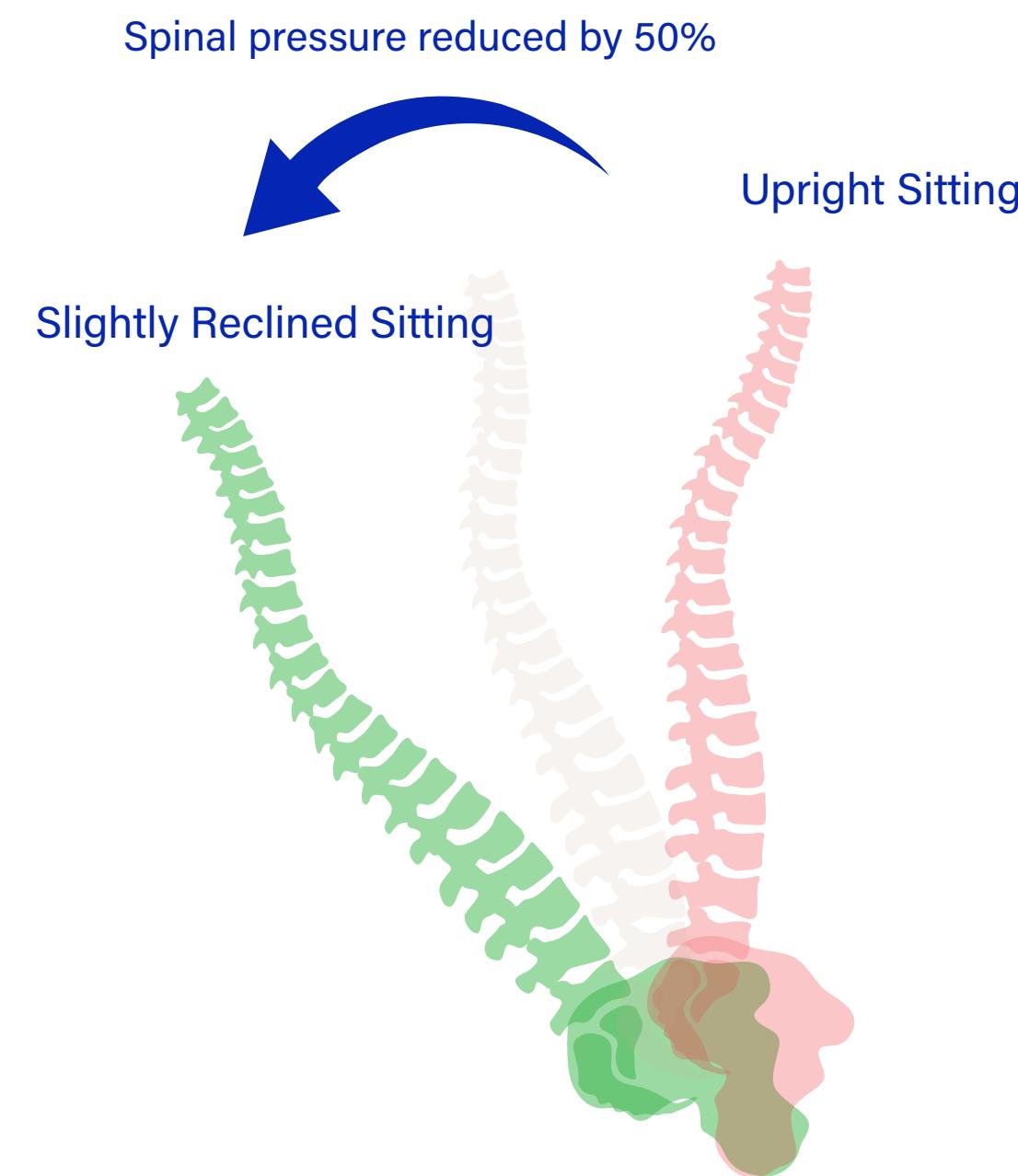
01.ZERO-GRAVITY SPINAL PROTECTION MECHANISM

SPINAL PRESSURE REDUCED APPROXIMATELY BY 50%^[Note 2]

Protecting the spine: reducing gravity lifting, effectively reducing pressure on the spine



Bio-Antagon Mechanism™



01.ZERO-GRAVITY SPINAL PROTECTION MECHANISM

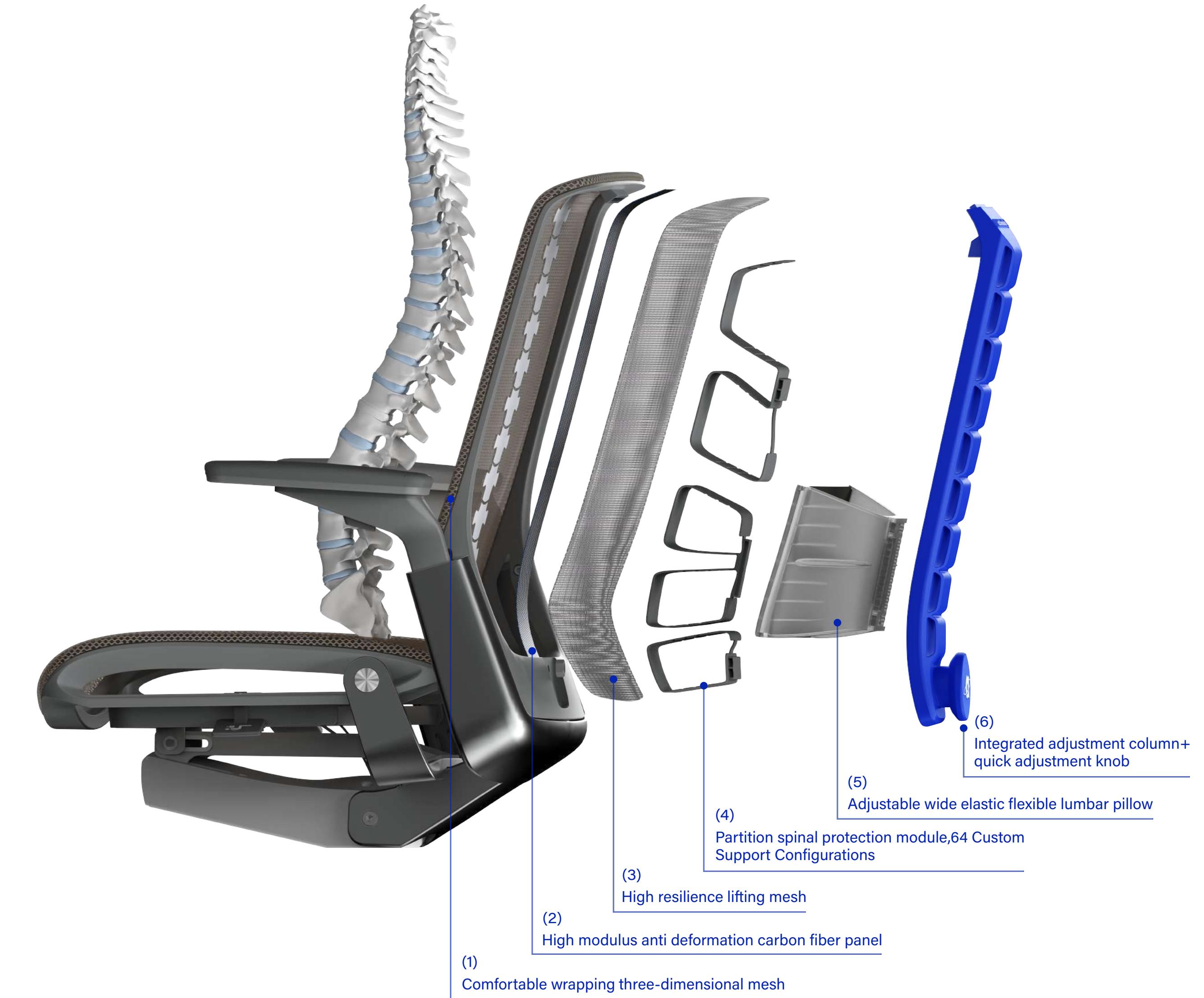
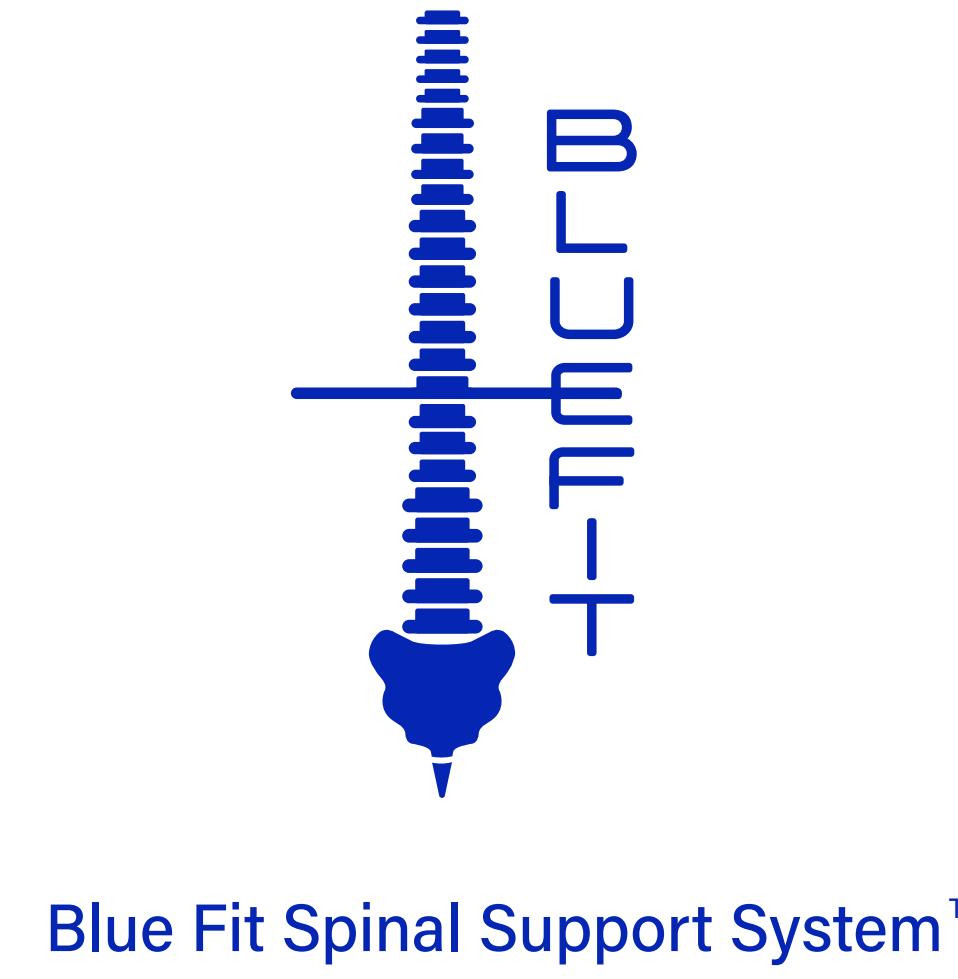
Dynamic sitting posture · Resting at will

Activate the spine: maintain the body's initiative, freely tilt and move slightly, without stiffness

As the body stops



02.BLUE FIT 6-DIMENSIONAL SPINAL SUPPORT SYSTEM



03.META NECKREST™

Multi mode support: Meta Neckrest™ patent technology, regulating to meet multiple modes of work, rest, and reading [Note 5]

One headrest loosens the entire back: supports the muscles under the headrest, can release the head, neck, shoulders, back, and lumbar with one headrest [Note 6], linked with the zero-gravity spinal protection mechanism, providing overall spinal protection

Assist in sensitive response: elastic frame, bow like design, providing micro motion support for head and neck, even shoulder.



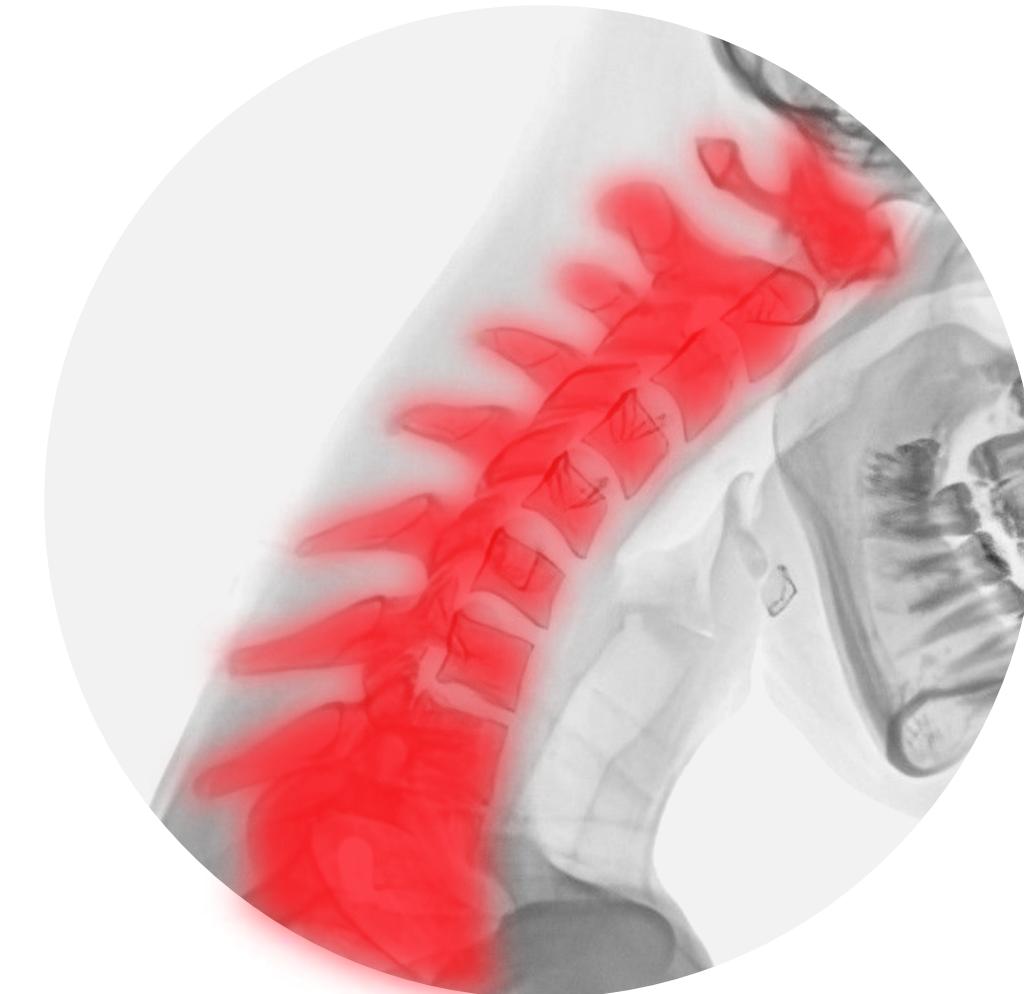
Meta Neckrest™

Wide surface contact, wide adjustment range

When the head is fully supported, relax the suboccipital muscles

Send a signal to the whole body to release the back, and coordinate the wide headrest with the backrest

Completed seamless support for the head, neck, shoulders, back, and waist



Neck Muscle Strain



BLUE FIT SPINAL PROTECTION CENTER

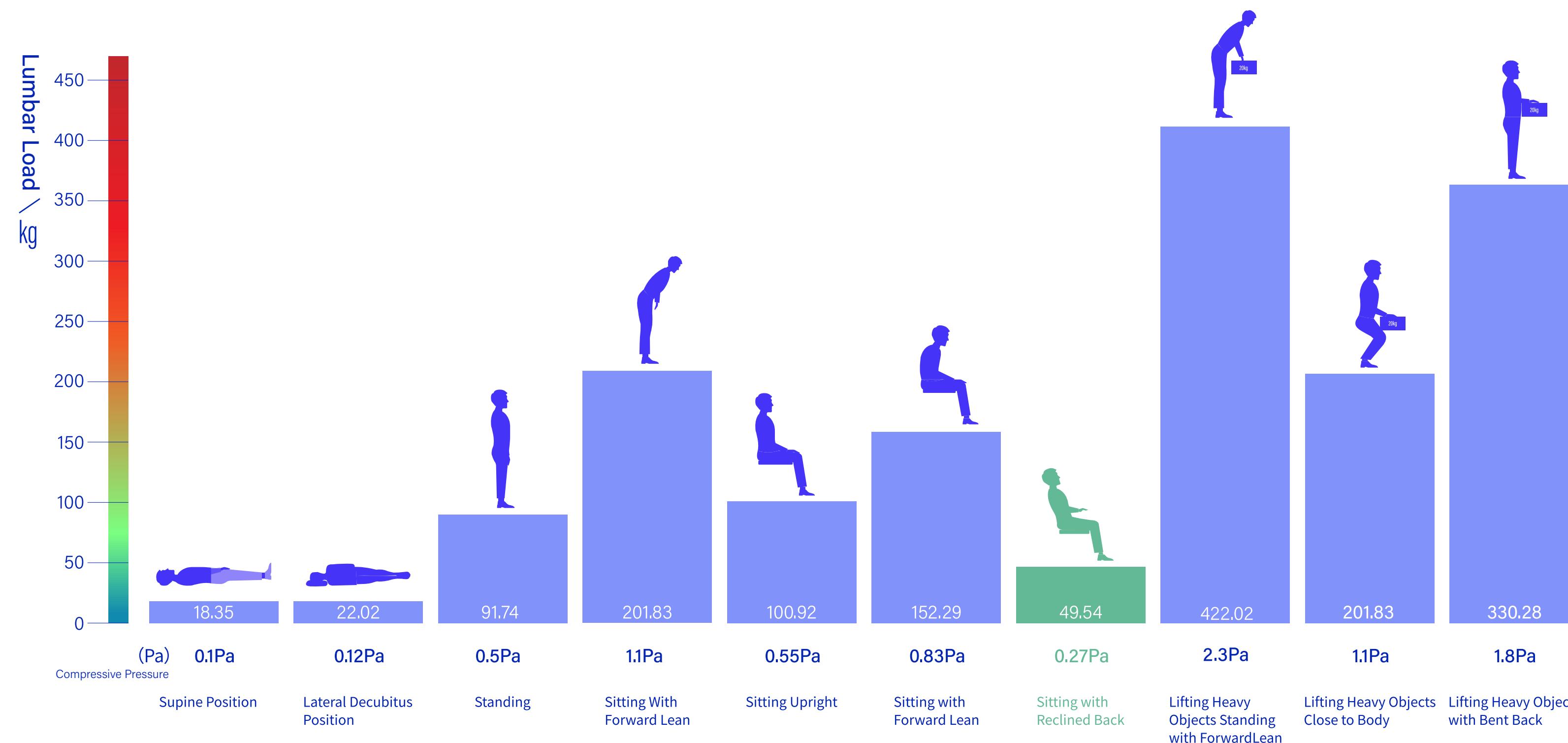
SIX SPINAL PROTECTION FUNCTIONS

- 01 Slightly reclining posture · Passive spinal protection: reduces spinal pressure by 50%
- 02 Refusing muscle bone internal friction:
The most natural and relaxed posture in the "zero gravity" neutral position
- 03 Rigid spinal protection with core carbon fiber
- 04 Daily spinal care · Regular care to assist in returning the spine to a neutral position
- 05 Overall spine protection · safer
- 06 Graded Spinal Care · More Professional
Graded, zoned, personalized customization, long-term focus on spinal care

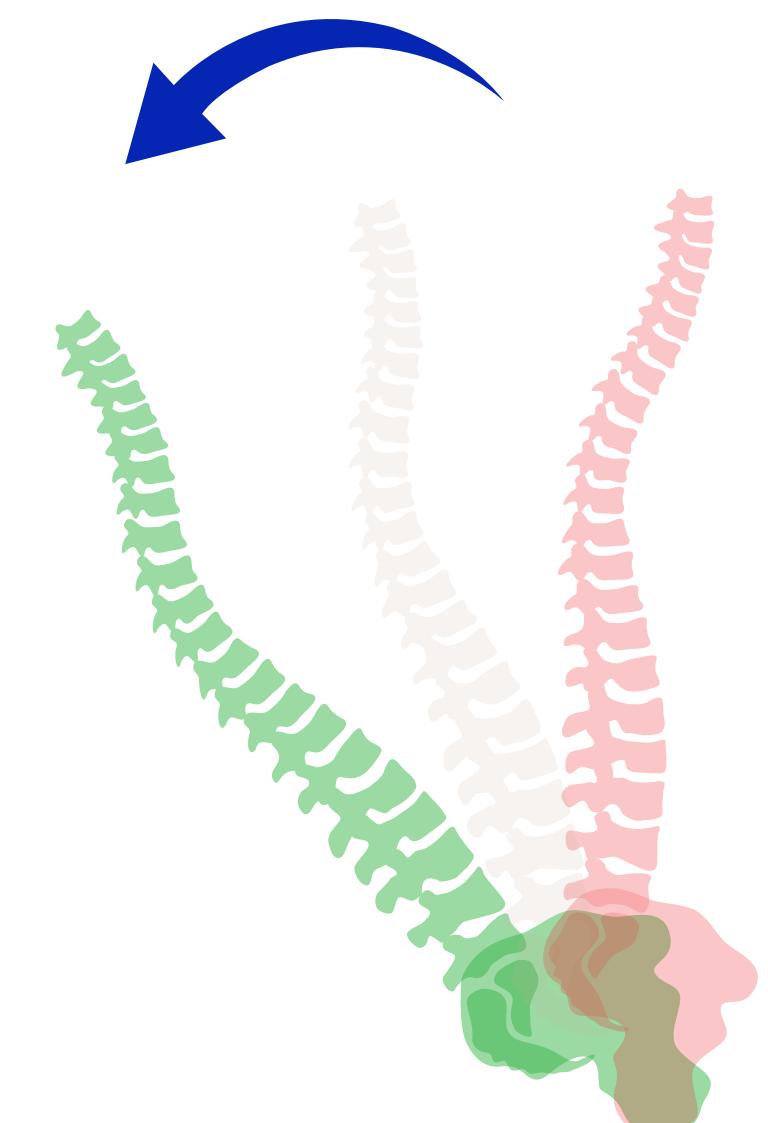
01. SLIGHTLY RECLINING POSTURE · PASSIVE SPINAL PROTECTION REDUCES SPINAL PRESSURE BY 50%

Intervertebral Disc Pressure (%) Based on Normalized Standing Posture

When the spine is in a slightly reclined and be supported, the pressure on the spine is reduced by approximately 50%. The Zero Gravity Spinal Protection Mechanism allows users to easily control their body to enter a "slightly reclined, gravity-reducing" posture supported by our "BlueFit" chair, effectively reducing back pressure and protecting your spine.

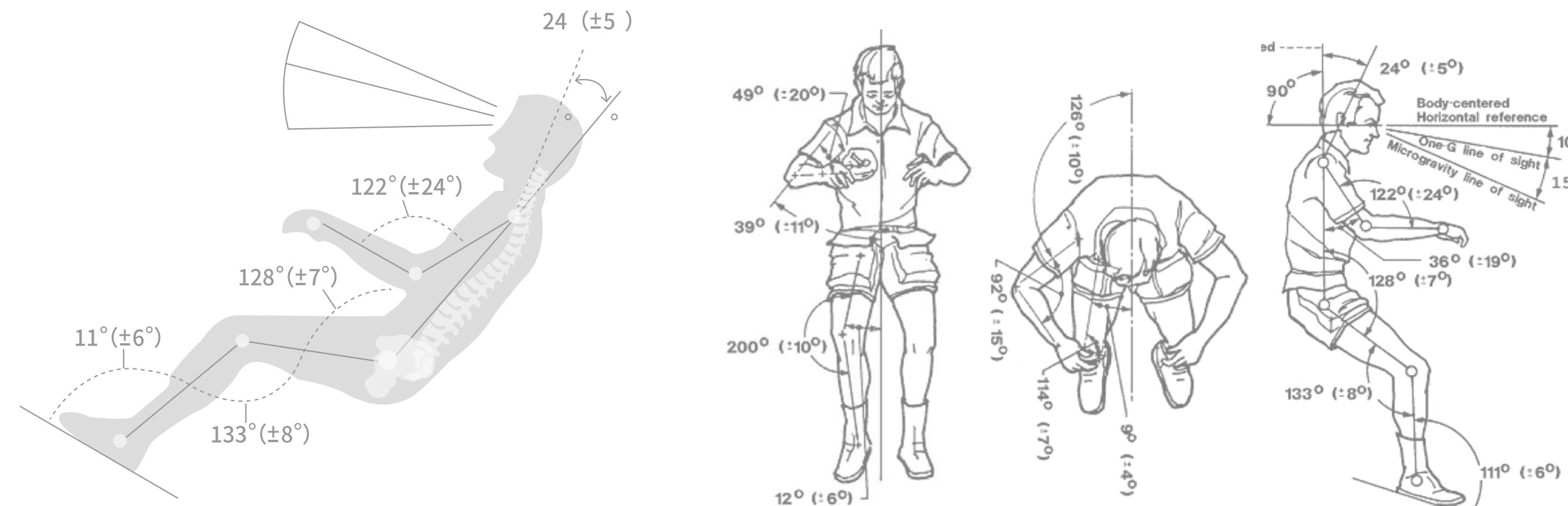


Spinal pressure reduced by 50%



02.REJECT MUSCLE BONE INTERNAL FRICTION

The most natural and relaxed posture in the "zero gravity" three-dimensional state Archimedes' "zero gravity" spine protector is a reduced gravity sitting posture that maintains a dynamic zero gravity "neutral posture" of the human body. The concept of zero gravity posture was initially proposed by NASA in their research on the body posture of astronauts in zero gravity environments. It is a Neutral Body Posture (NBP) neutral posture, which describes a body posture that is naturally relaxed in a zero gravity environment without external force



▲ Neutral body posture(NBP)中立体态

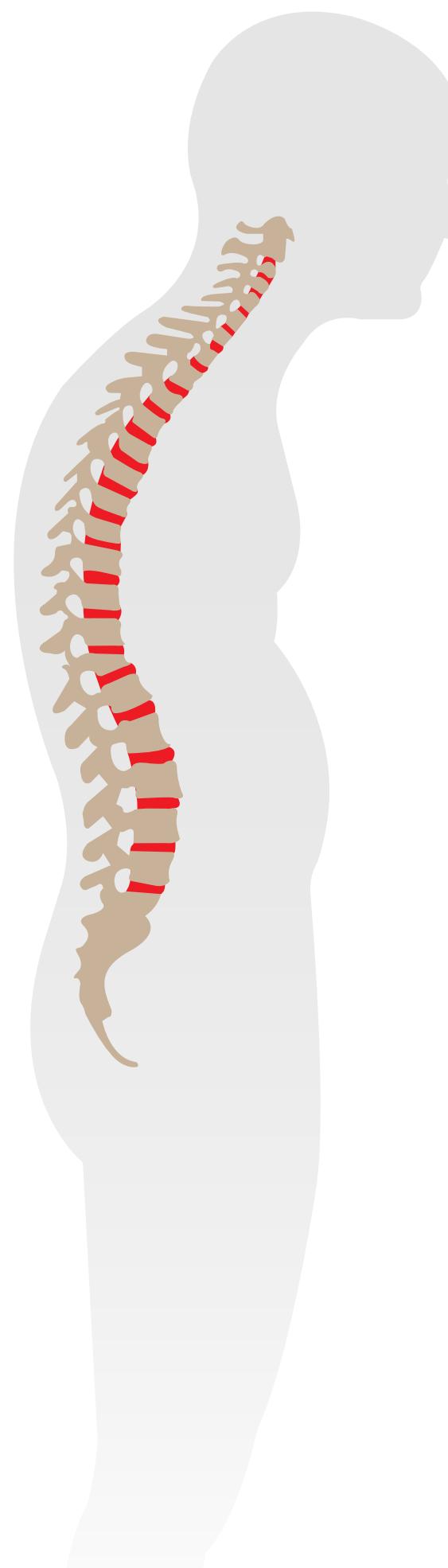
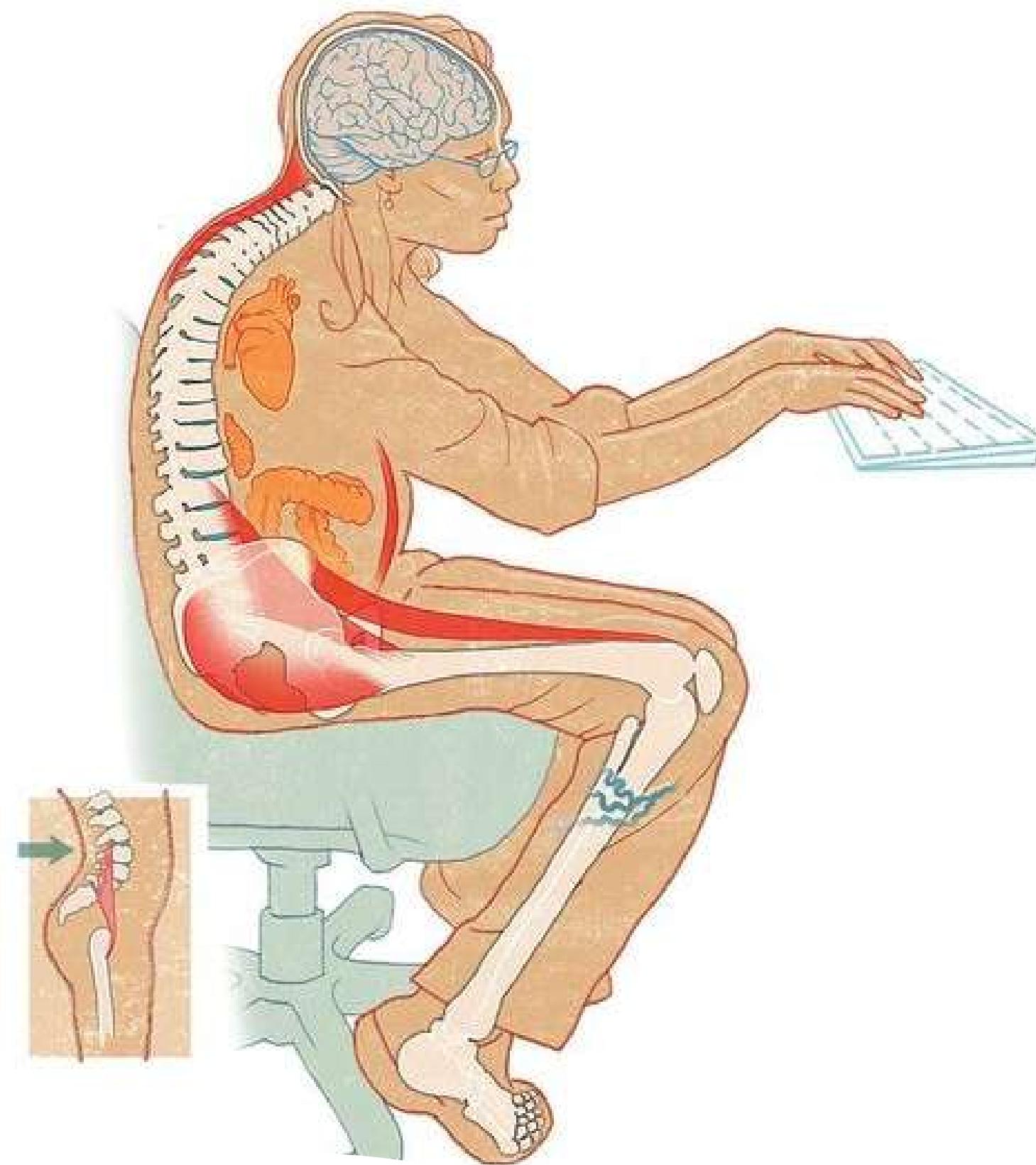
Neutral body posture (NBP)

◀ Archimedes' "Zero Gravity" spinal protection is a sitting posture designed to maintain the human body in a dynamic zero-gravity "neutral posture." The concept of the zero-gravity posture was initially proposed by NASA in their research on astronauts' body posture in zero-gravity environments. It describes a natural and relaxed body posture that emerges in a zero-gravity environment without external forces, known as the Neutral Body Posture (NBP).

Note: The displayed segment angles are average values, with standard deviations in parentheses. This data was developed during Skylab studies and is based on measurements from 12 subjects.

03.RIGID SHAPE PROTECTION FOR THE SPINE, CORE CARBON FIBER

Core anti deformation carbon fiber, rigid protective type, not only for lumbar and sacral protection, but it continues to maintain a neutral posture throughout the spine

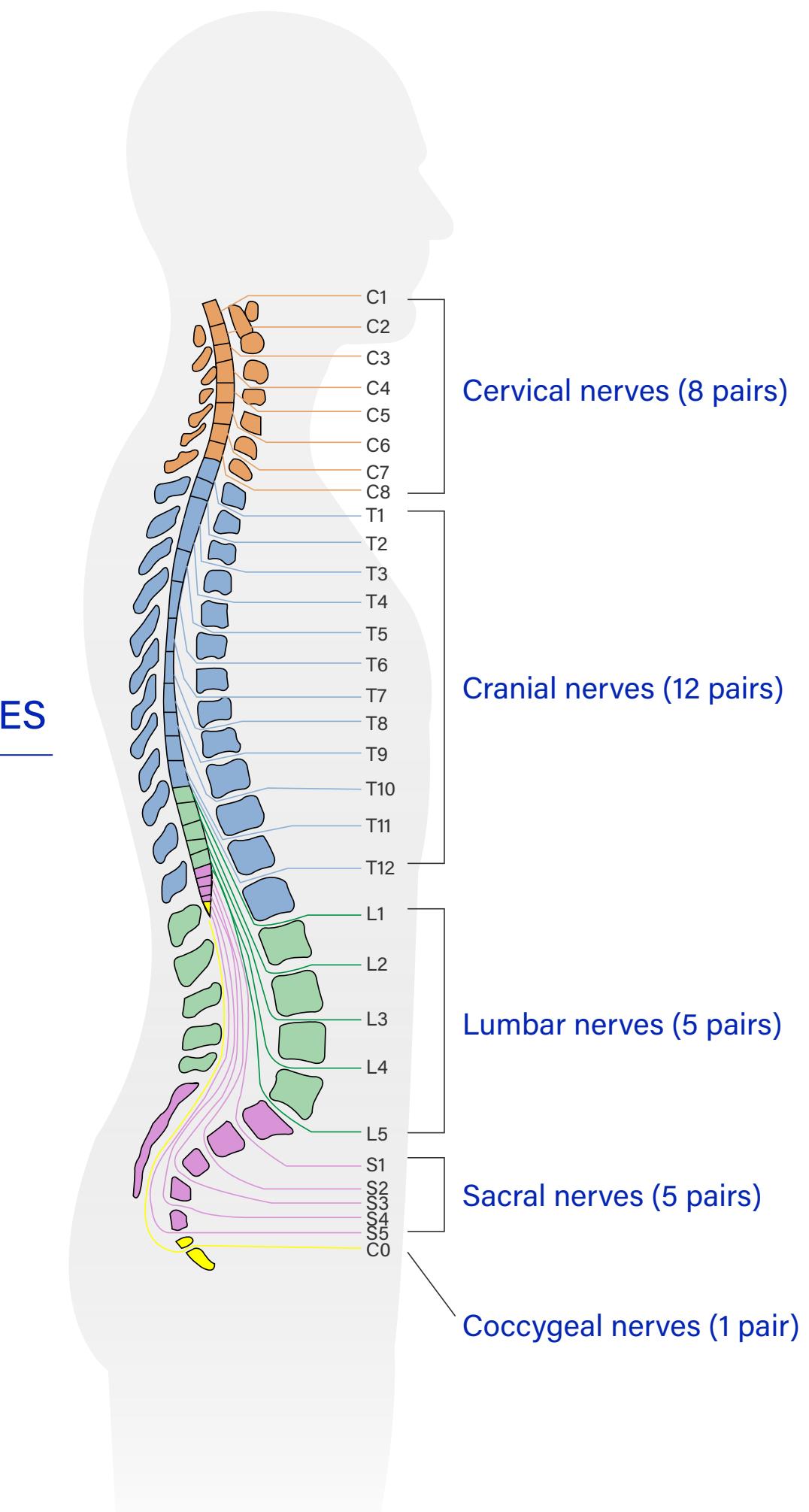


04.DAILY SPINAL CARE, REGULAR MAINTENANCE AND ASSISTANCE IN RETURNING THE SPINE TO A NEUTRAL POSITION

Activating the muscles and fascia around the spine in a dynamic micro tilt state helps restore the neural system's proper control over the muscles
Strengthen the motor neural memory of spinal neutral position, repair proprioceptive function, and assist in restoring spinal neutral position

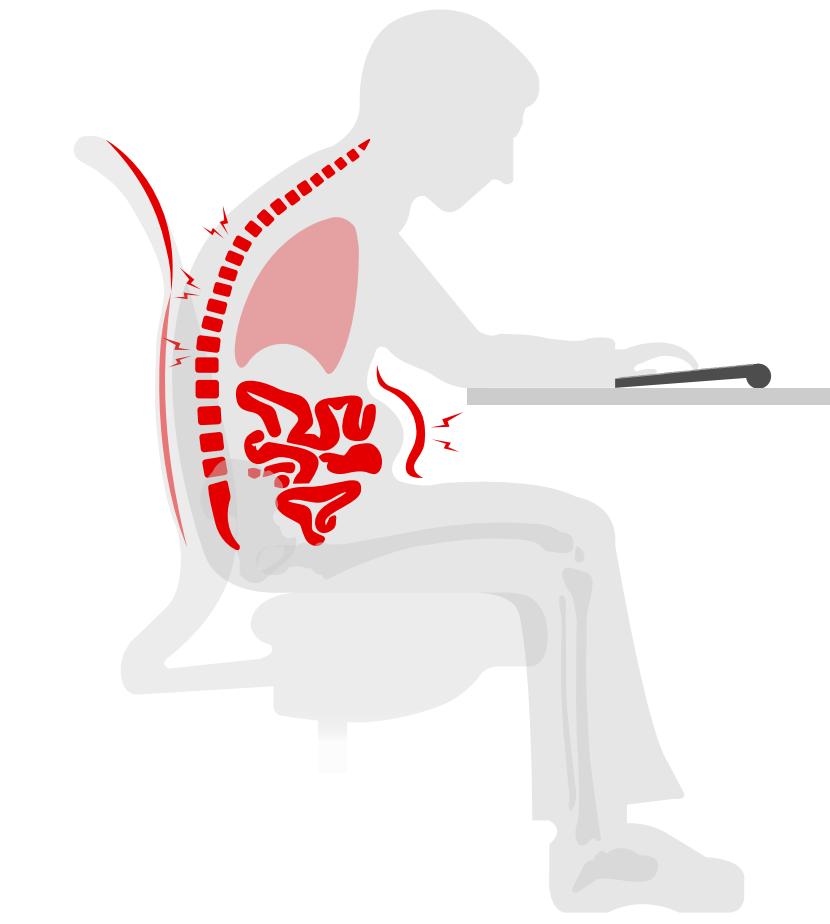


SCHEMATIC DIAGRAM OF SPINAL NERVES



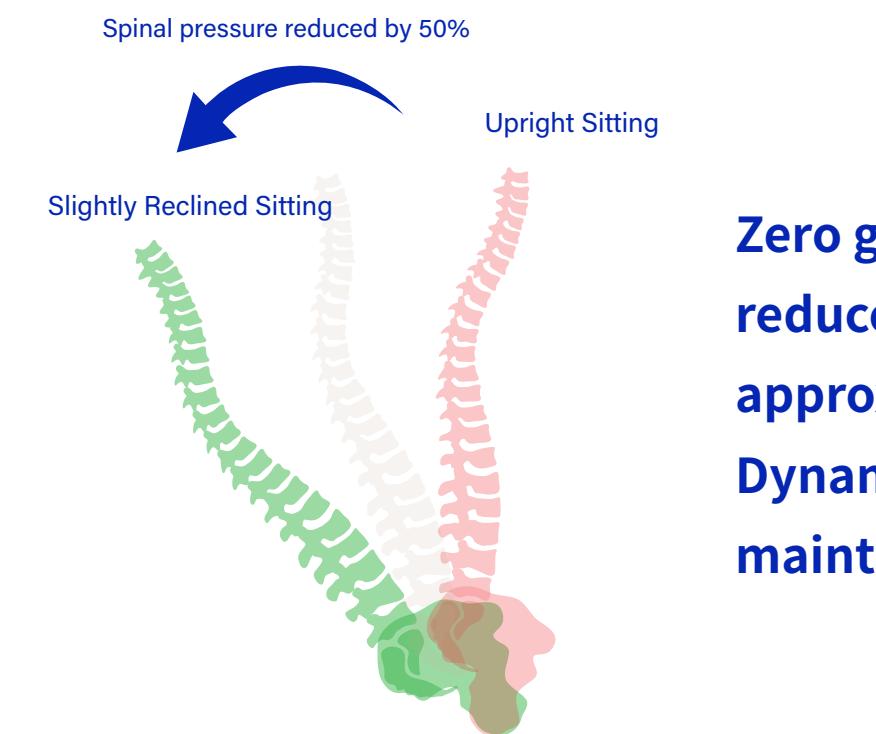
05.COMPREHENSIVE SPINAL PROTECTION · SAFER

Upright Mesh-Back Chair



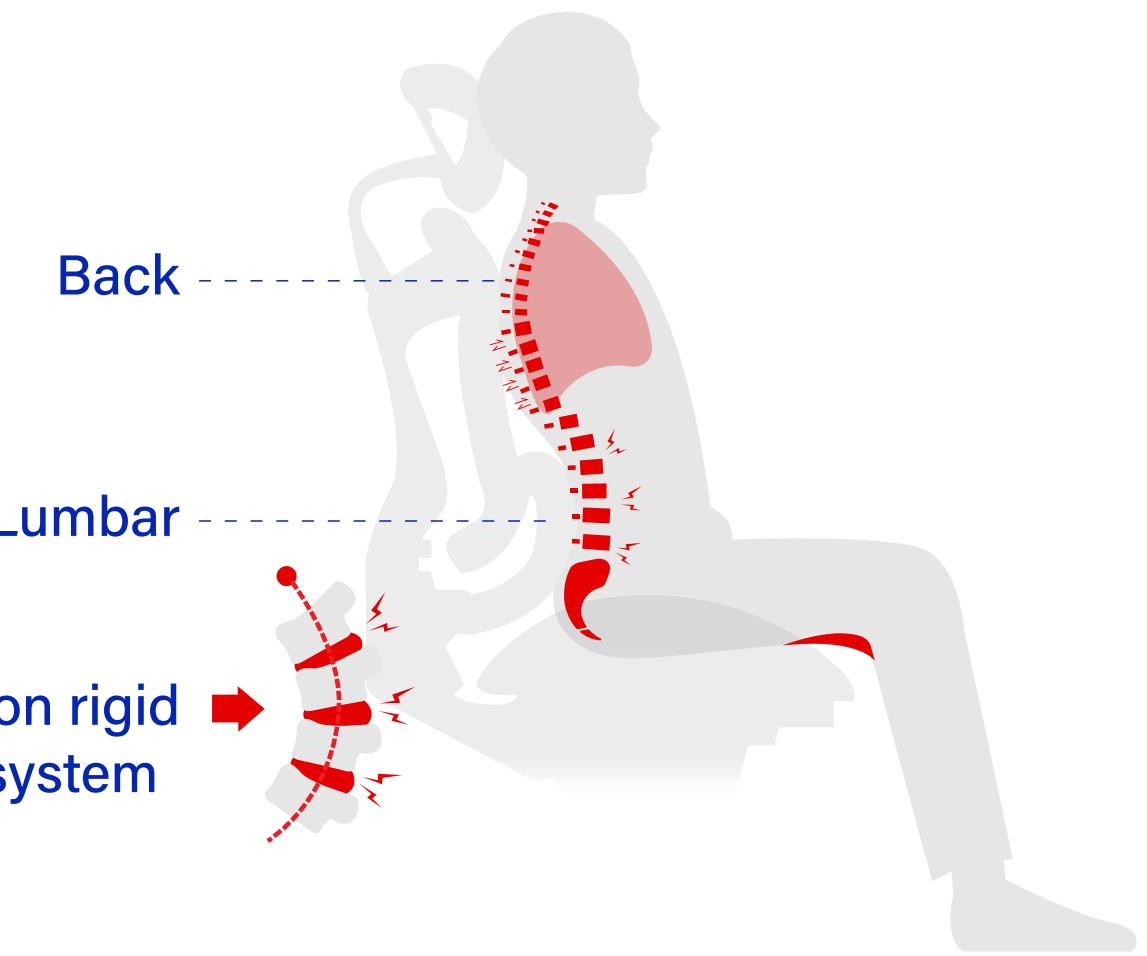
Inadequate back support
with poor postural adaptability
Limited lumbar focus
promotes slouching

Aerospace Spinal Protection Chair



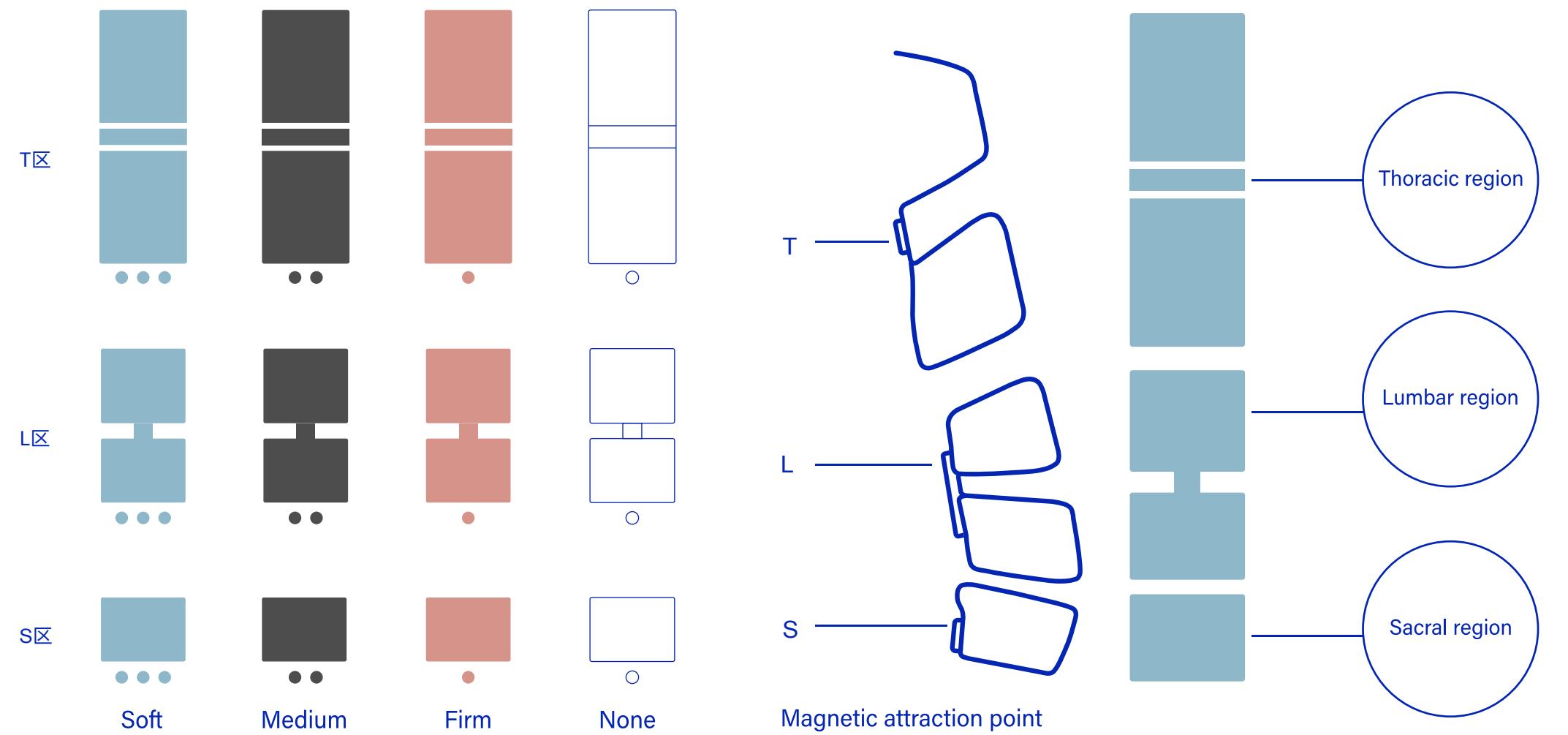
Zero gravity posture
reduces pressure by
approximately 50%
Dynamic full-spine support
maintains neutral body posture

Dual-Zone Ergonomic Mesh Chair



Hyperextended lumbar compression
Thoracic support deficiency
increased disc shear stress risk

06.GRADED SPINAL PROTECTION · MORE PROFESSIONAL GRADING, ZONING, PERSONALIZED CUSTOMIZATION AND A LONG-TERM FOCUS ON SPINE CARE



The state of the human body's muscles and bones often changes due to work and lifestyle, such as overtime and exercise. By simply adjusting the tension of the entire back support or replacing the spinal protection area module, the strength of the spinal protection can be quickly fine tuned. There are up to 64 ways to adjust the combination of area support modules, and one chair can solve the needs of spinal support changes in various periods, providing long-term continuous support



DETAILED FUNCTIONS OF BLUE FIT

4D Headrest

Ultra wide pillow surface, 4D headrest, with an up and down range of 100mm, a front and back range of 50mm, and a self rotation angle of 70 degrees, Arm rotation angle 70 degrees, Elastic frame, designed with a bow string like shape, provides flexible elastic space for the headrest, supporting full and not stiff, with unlimited left and right micro movements and versatile adjustments



Spinal support

Blue bone 6-dimensional spinal support system. Shubao three-dimensional mesh+high initial strength mesh+high modulus anti deformation carbon fiber board+partitioned spine protection module, 64 combination customization modes+overall adjustment column, quick adjustment knob+adjustable flexible lumbar pillow, 6-layer combination, partitioned, graded, personalized spine protection.

Equipped with biomimetic carbon fiber spinal support plate, adopting adaptive patented technology, high modulus anti deformation carbon fiber plate, normal shape protection, assisting in maintaining the neutral position of the spine, cultivating good posture in daily life, and protecting the spine as a whole;

Partition spinal protection, customizable replacement of thoracic, lumbar, and sacral support accessories. There are 3 different soft and hard strength replacement parts to choose from. There are 64 combination schemes available.

Adjustable support column+quick adjustment knob, which can be linked to fine tune the elasticity and fit of all components, adjust the overall support of the backrest, and provide overall protection for spinal health

Lumber support

Wide elastic flexible lumbar support, adjustable up and down by 45mm



Tilt force adjustment handle

Chassis tilt force adjustment handle, adjustable tilt force, suitable for individuals of different heights and weights, suitable for a wider range of people

Mechanism

Upgrade from biomechanical chassis to zero gravity spine protection chassis; Equipped with an upgraded soothing rocker arm, it is an externally visible rocker arm; The zero gravity spine protection chassis allows users to easily control their bodies and enter a "slightly tilted and gravity reducing" sitting position supported by the "blue bone" shape. When the spine is in a slightly tilted state, the pressure on the spine is reduced by about 50%, effectively reducing back pressure and protecting the spine; The tilt angle ranges from 102 degrees to 140 degrees, with no level locking and real-time dynamic support provided; It can be locked and automatically reset within the range without the need for manual unlocking

Material

Full mesh chair with double-layer functional mesh: comfortable wrap three-dimensional mesh+high toughness lifting mesh, providing both support and comfort



Backrest

Foldable storage backrest, freeing up more storage space; Double layer mesh design: Comfortable three-dimensional mesh+high toughness lifting mesh, supporting comfort without compromise

Armrests

4D multifunctional armrest, adjustable up and down by 100mm, moved forward and backward by 50mm, and moved left and right by 20mm. Adjust the left and right angles by 40 degrees, with a minimum clearance of 350mm and a maximum clearance of 600mm. Provide better support for different working conditions

Seat depth

The seat depth adjustment is designed with paddle shifters, which are easy to operate and adjust, and can increase the seat depth by 60MM. Foundation seat depth 420mm, seat width 520mm

Gaslift

Class 4 inert gaslift, passed the Bifma safety test in the United States and the Din4550 safety test in Germany, with a lifting range of 70mm

The lifting and tilting locks are designed with wire control, located on the left and right sides of the seat cushion, making it easy to control the lifting and tilting locks

Seat

The front edge of the cushion features a waterfall design that does not compress the legs; Five layer structure full mesh cushion

Three layers of comfortable three-dimensional mesh+two layers of tough support mesh, providing both a sense of wrapping and strong support

Footrest

Spacious and silent nap footrest, available for use as needed, easy to pull and flip, with simple operation; Steel bracket foot pedal, stable, firm, sturdy and durable; The longest length from the backrest to the end of the footrest is 880mm, and the pull-out length is 460mm. The width of the footrest surface is 360mm

Five-star base

Cast aluminum five-star base, silent PU castors



Mars Orange



Aerospace Blue



Space Black



Aurora Green



Meteorite Gray



Lunar Gray



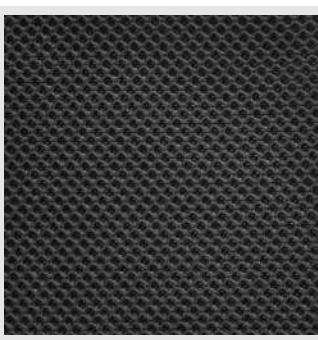
Interstellar Blue



Jupiter Brown



Comfortable Sandwich Mesh



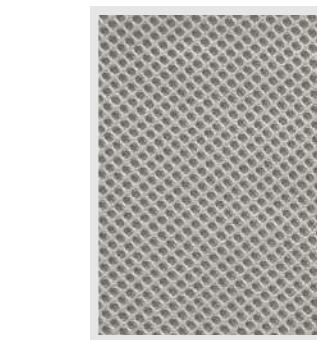
MFS01
Space Black



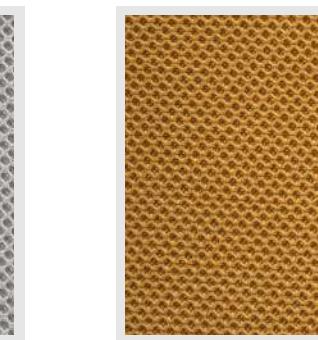
MFS02
Interstellar Blue



MFS03
Meteorite Gray



MFS04
Lunar Gray



MFS05
Jupiter Brown



MFS06
Aurora Green



MFS07
Mars Orange



MFS08
Aerospace Blue

Configuration



Footrest

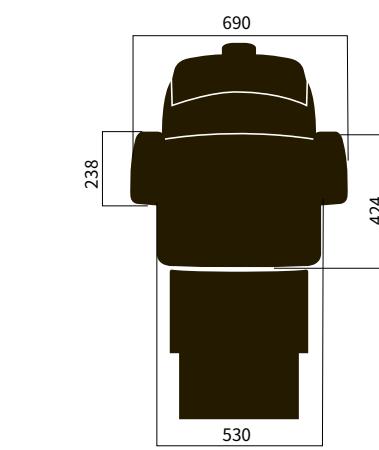
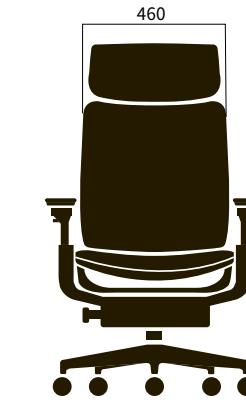
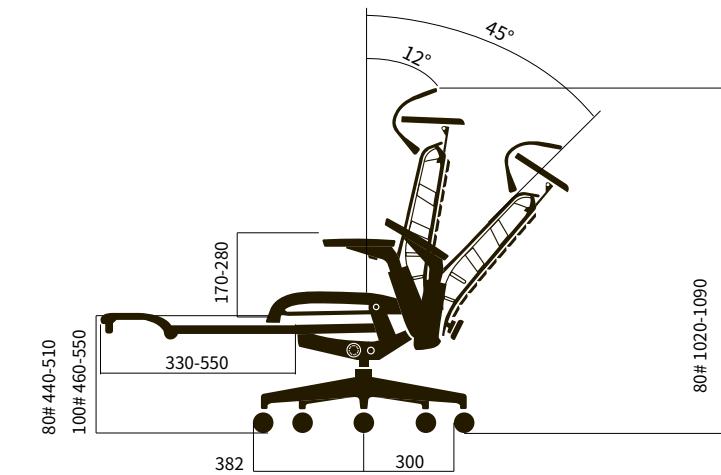
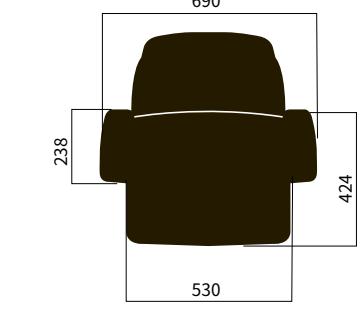
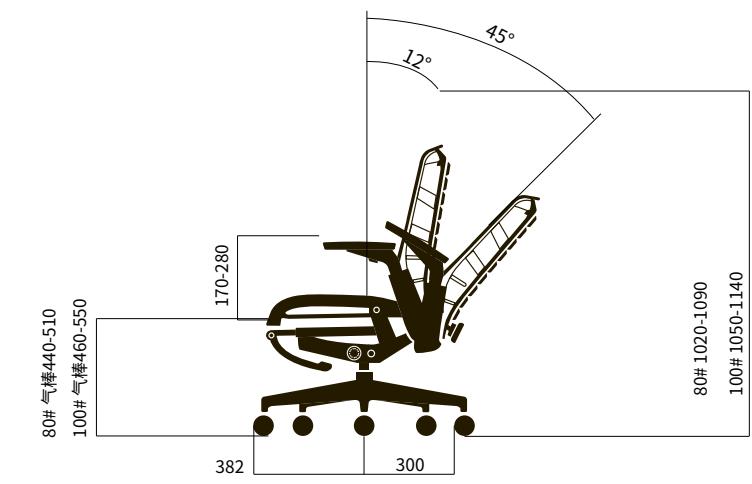
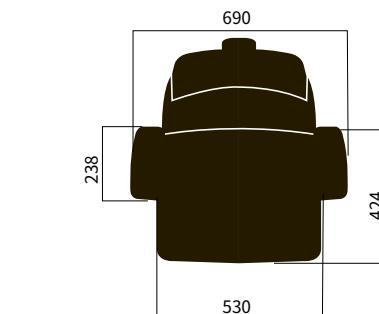
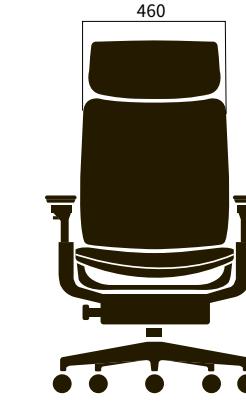
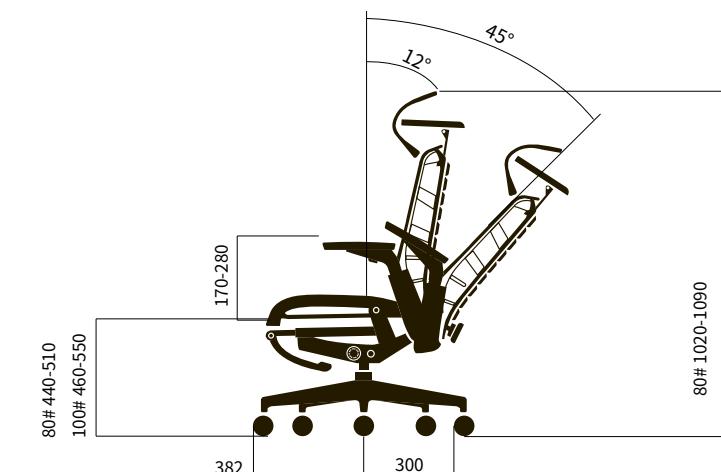


4D Headrest

Product Configuration



Specification





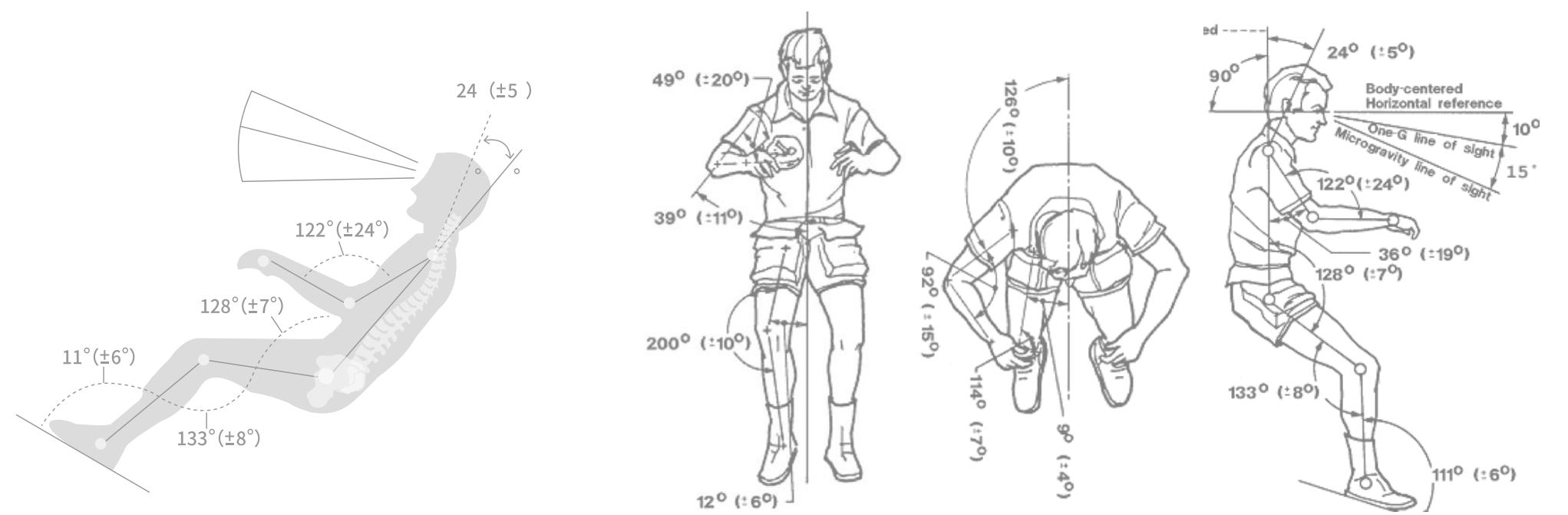




注解：

[Note 1] Data sources:DonaldA.Neumann,Kinesiology of the Musculoskeletal/System:Foundations for Rehabilitation,E/sevier Taiwan,2013-7-L.
WikeH-JNeefRCaimiMet al:New in vivo measurements of pressures in the intervertebral disc in daily life,Spine24:755,1999

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BLUEFIT 6-dimensional spinal comprehensive support system[Note3]

Normal shape protection,Neutral position cultivation,Fine tuning and customization

Normal shape protection:BLUEFIT 6-dimensional spinal comprehensive support system,Assist in maintaining the neutral position of the spine and preserving its natural physiological curvature

[Note 4] **The neutral position of the spine refers to its natural, balanced anatomical alignment when free from excessive external force interference. It plays a crucial role in maintaining posture and supporting movement in the human body. The following explanation will focus on its specific manifestations and importance.**

Lateral View: Four physiological curves form an elastic S-shaped spring structure: cervical lordosis (C1-C7), thoracic kyphosis (T1-T12), lumbar lordosis (L1-L5), and sacral kyphosis (S1-S5). This configuration optimizes impact absorption while protecting critical neural structures.

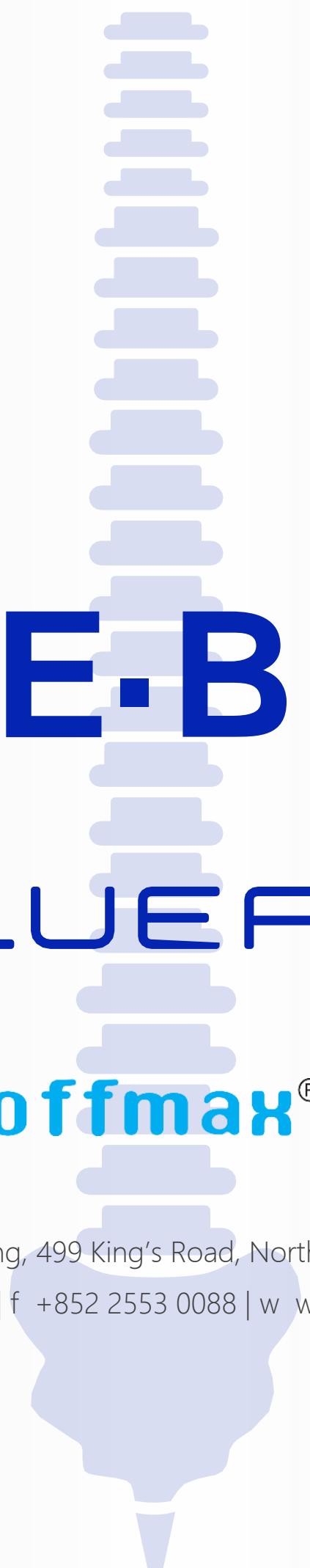
Front view: The neutral position of the spine should be straight. Starting from the external occipital protuberance at the base of the skull's occipital bone, along the spinous processes of the spine down to the sacrum, the alignment of spinal spinous processes should approximately form a straight line. The paravertebral muscles and ligaments on both sides maintain symmetry and balance without significant lateral curvature or rotational muscle status.

Muscular state: In spinal neutral position, the muscle groups maintaining spinal stability exhibit a balanced tension state. For instance, the anterior muscle groups (including rectus abdominis and abdominal obliques) interact antagonistically yet synergistically with posterior muscle groups (such as erector spinae and multifidus muscles), along with lateral muscles like quadratus lumborum. These muscles maintain equilibrium - neither excessively tense nor overly relaxed - ensuring spinal stability during various postures and movements. This coordinated muscular balance preserves normal spinal alignment and functional integrity during both static positions and dynamic activities.

[Note 5] **The Meta Neckrest™ provides task-specific cervical support customization for work, reading, or relaxation.**

[Note 6] **By supporting the suboccipital muscles (key posterior chain stabilizers), our design stimulates dura mater fascia interaction, triggering systemic relaxation signals to reduce cervicothoracic and lumbosacral fatigue.**

[Note 7] **Featuring aerospace-grade carbon fiber with superior specific modulus (stiffness-to-weight ratio exceeding alloys), our frame delivers unmatched structural rigidity at minimal mass. This material innovation, proven in NASA applications, ensures lifelong durability.**



BETTER SPINE-BETTER WAIST

BLUEFIT

offmax®

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