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Otto Bock Mobility Solutions

Cushions: Positioning Ourselves for Growth

Cushions Engineered for Performance



Overview

Live It...

- Seating Philosophy

Know It...

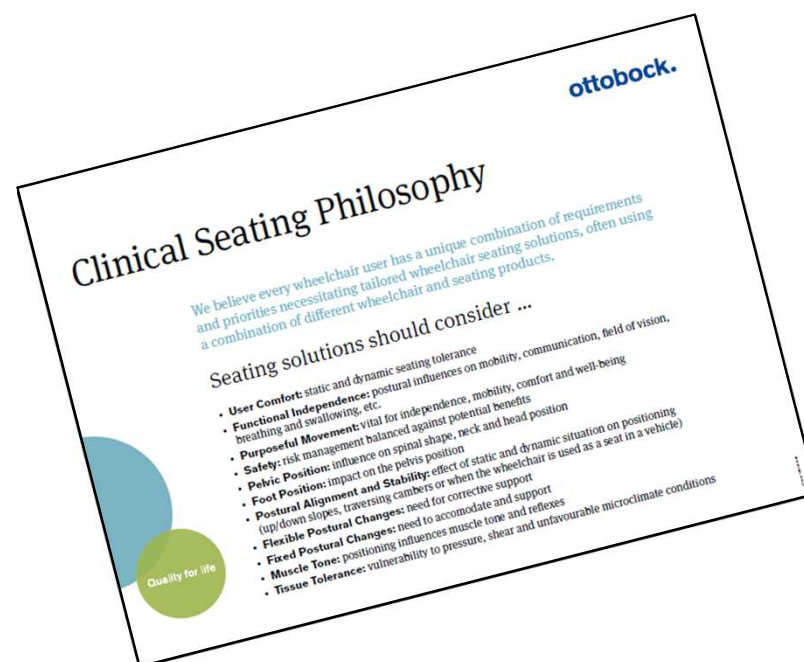
- Clinical Background
- Seating Molecule
- Key Features, Target Users and Competitors

Build It...

- Planning for the Future

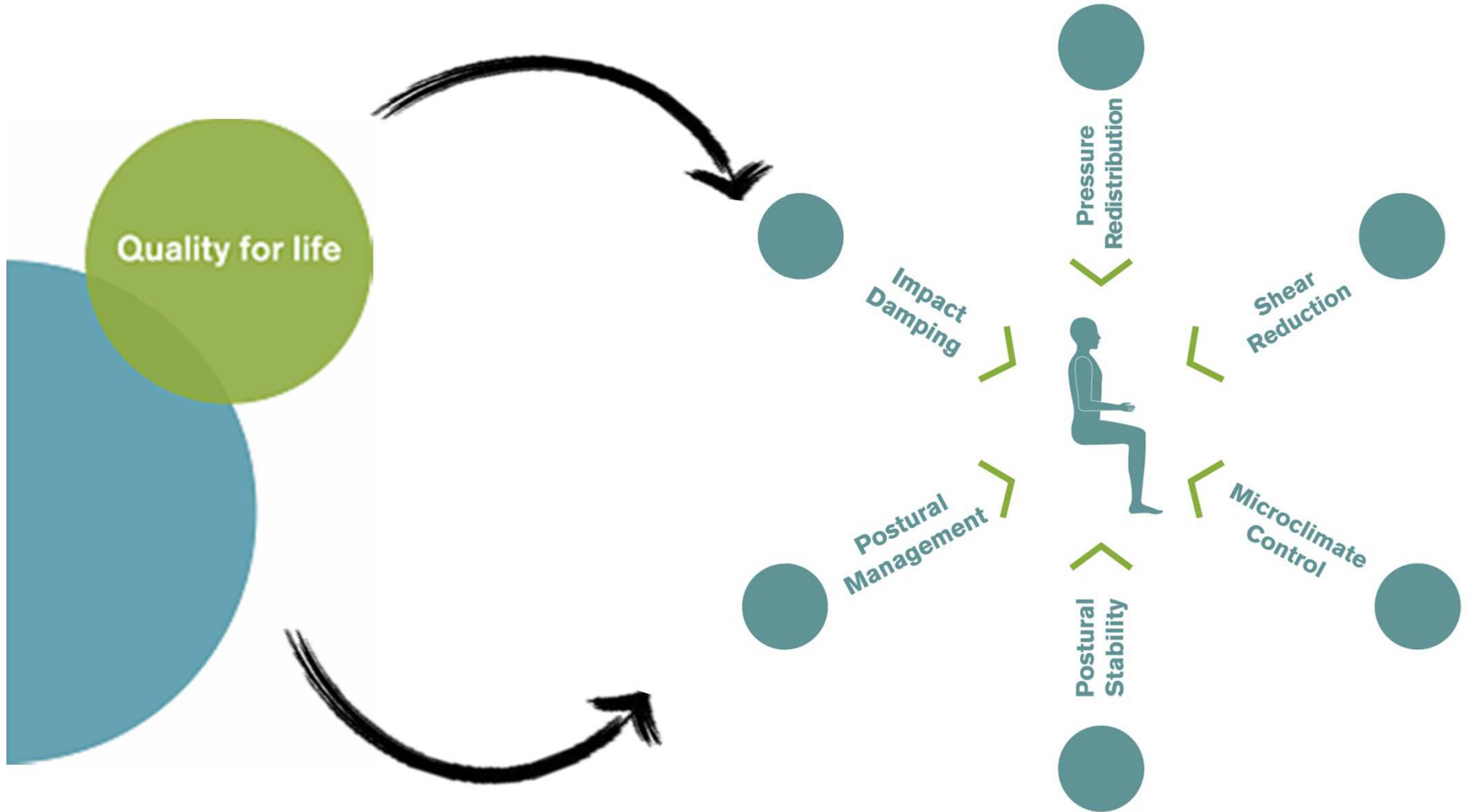
Seating Philosophy

“Every wheelchair user has a unique combination of requirements and priorities necessitating tailored wheelchair seating solutions, often using a combination of different wheelchair and seating products.”



Seating Molecule: Bringing 'Quality for Life', to life.

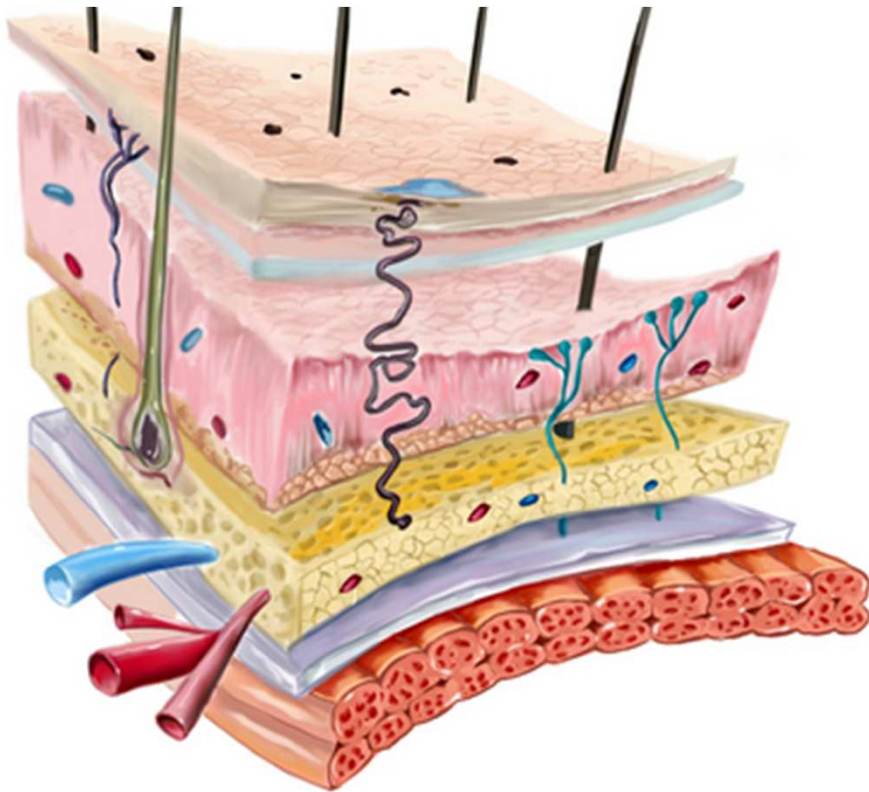
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Know It...



Clinical Background



Healthy Tissue



Organ Failure

Pressure Ulcer Definition

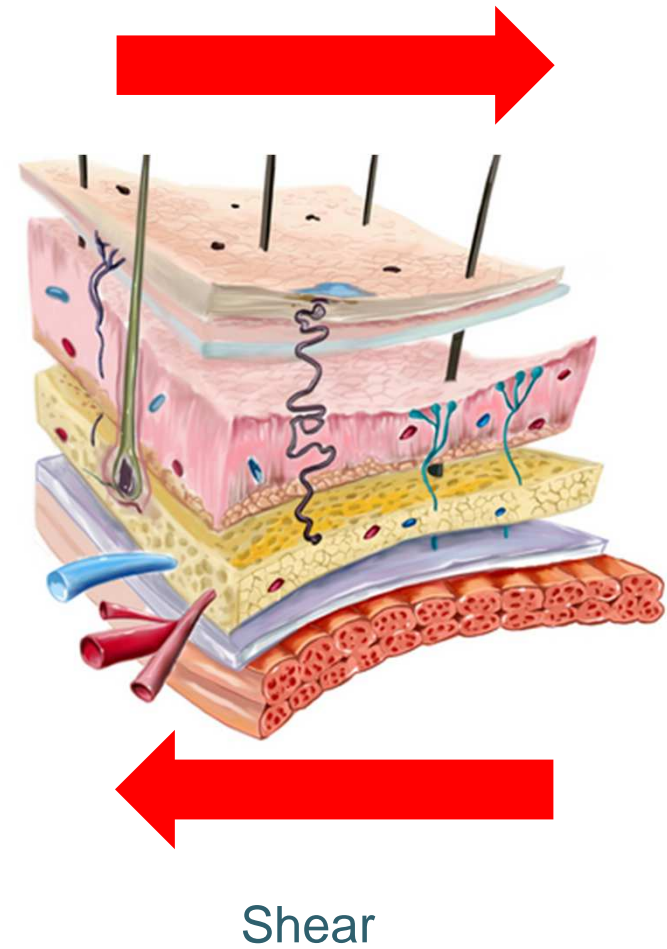
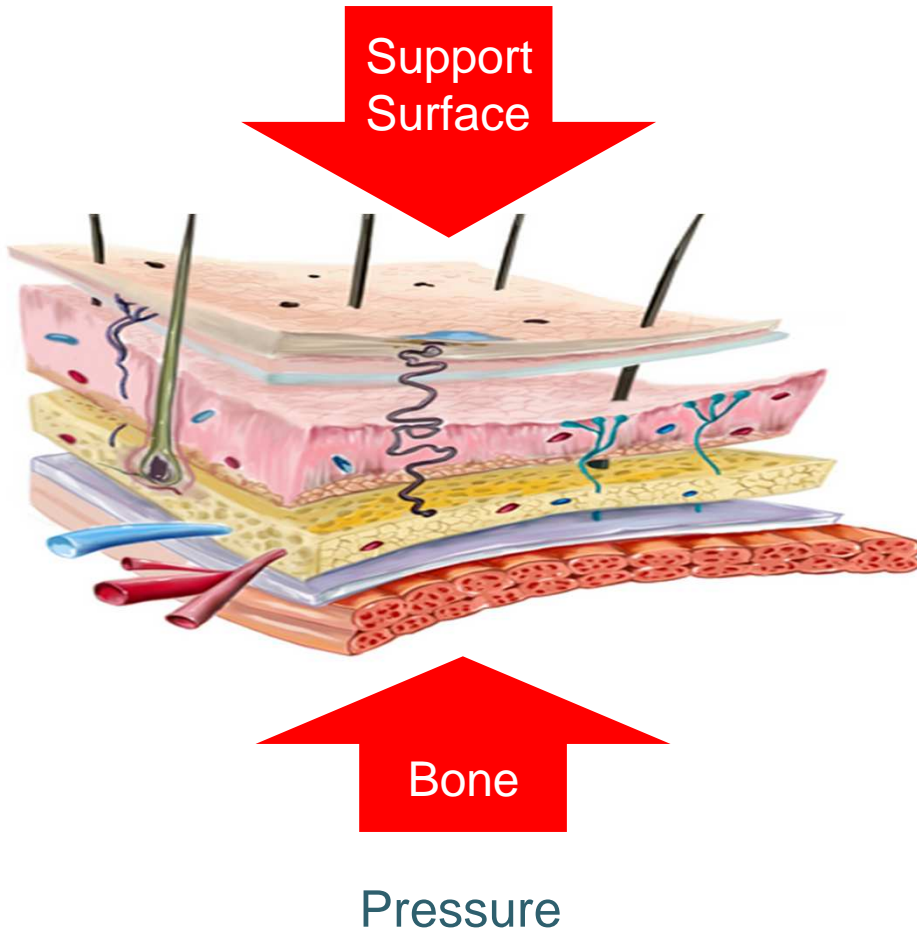
A pressure ulcer is localized injury to the skin and/or underlying tissue usually over a bony prominence, as a result of pressure, or pressure in combination with shear

(NPUAP-EPUAP 2009)



Christopher Reeves 1952 - 2004

Pressure and Shear



Microclimate



- The body demands 10% more O₂ and nutrients for every 1°C rise in temp

Shutterstock 128246861

Vibration and Shock

Shock and vibration can influence...

- Comfort
- Health
- Pain

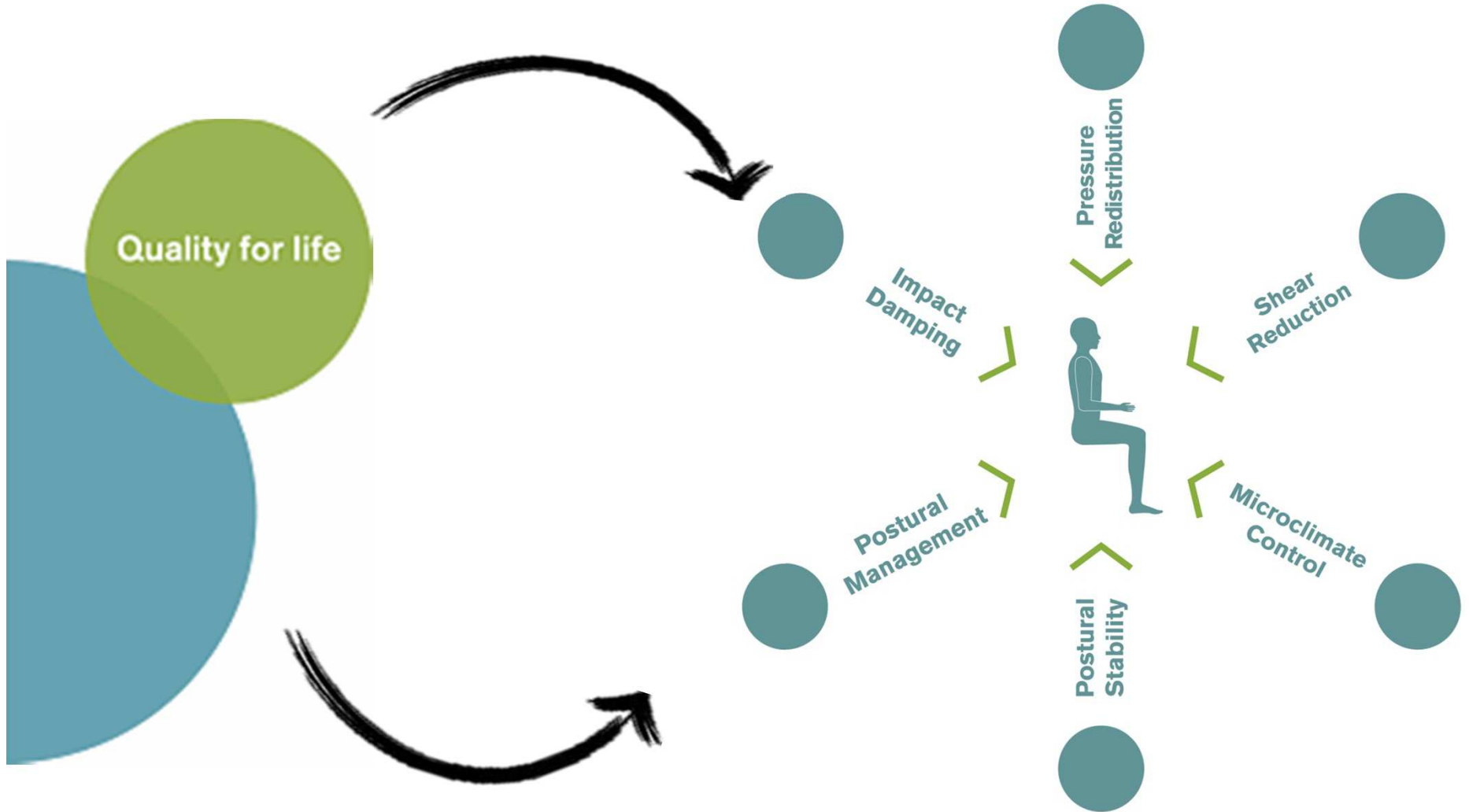
Particularly important for...

- Powered Wheelchair Users
- Transportation
- Active users



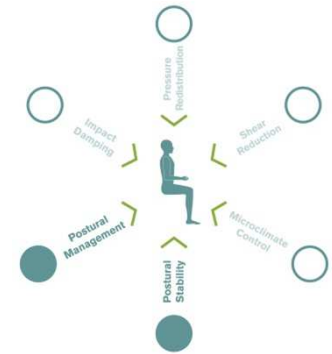
Seating Molecule: Bringing 'Quality for Life', to life.

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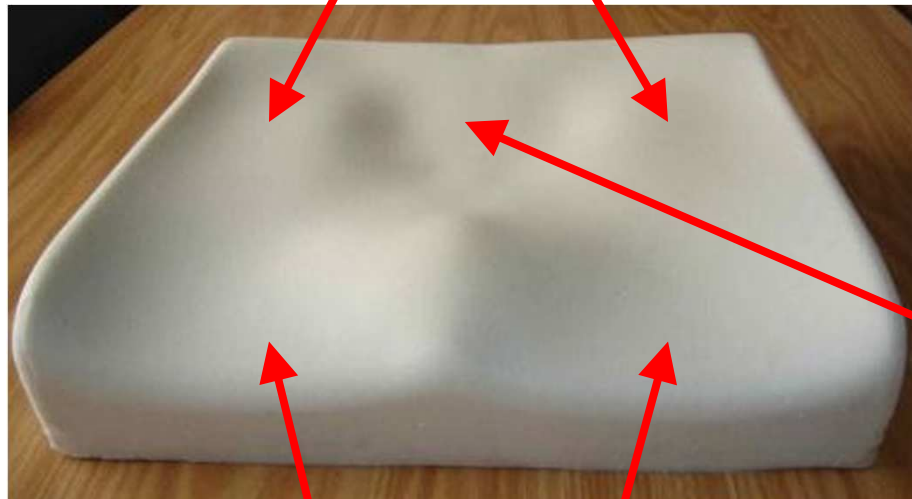


Terra and Aerial – Cushion Shape

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Postural Stability
& Postural
Management



Trocanter
Support

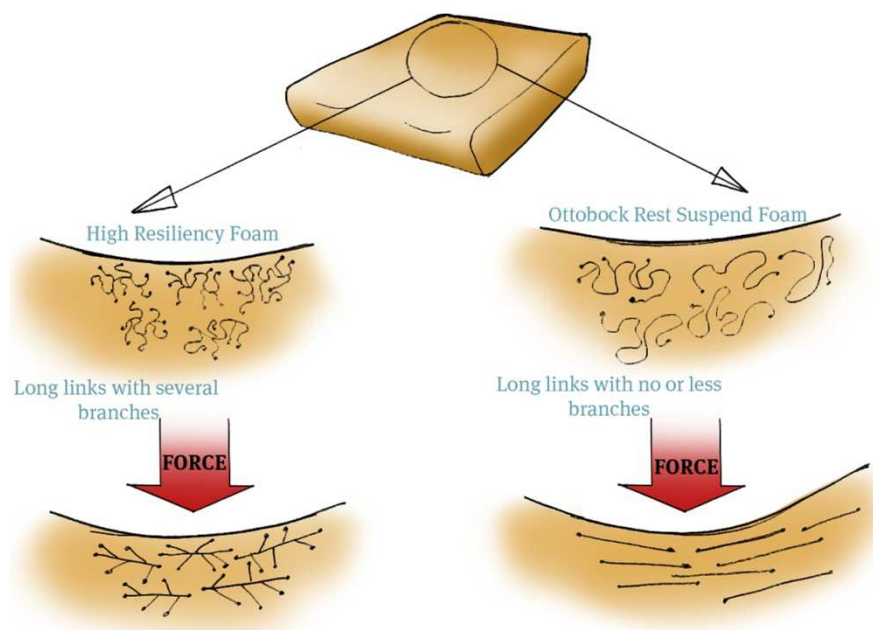
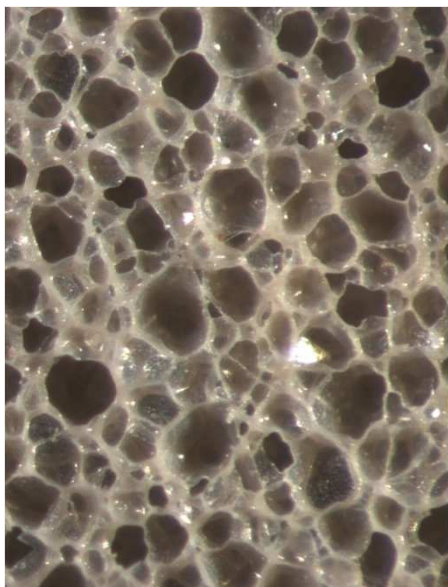
Ischial
Accommodation

Thigh Support

Terra Line



Terra – Rest Suspension Foam



- Improved Immersion and Envelopment
- Improved Durability
- Good Impact Damping

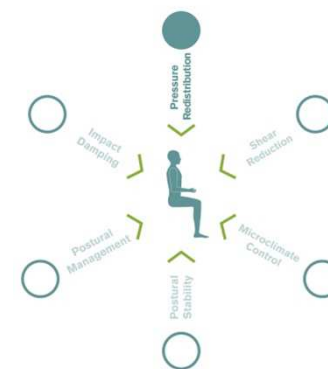
Terra - Pressure Redistribution



Immersion



Envelopment

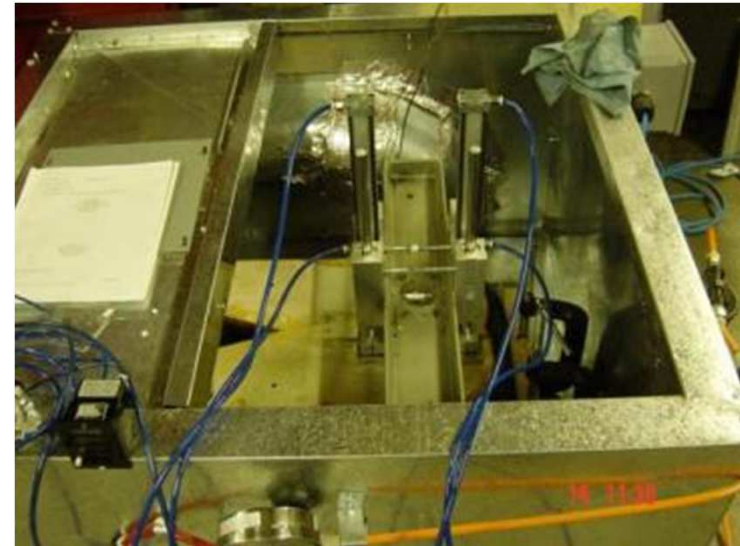


Pressure
Redistribution

- Distribute over surface areas
- Reduce damaging peak pressures

Terra - Durability

Desirable: short break-in period,
maintained pressure distribution and
comfort for extended time

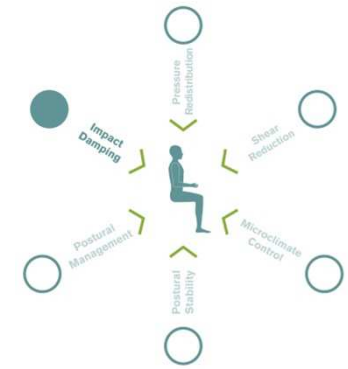


34,000 cycles at 70°F (21 °C) simulates 2 years use.

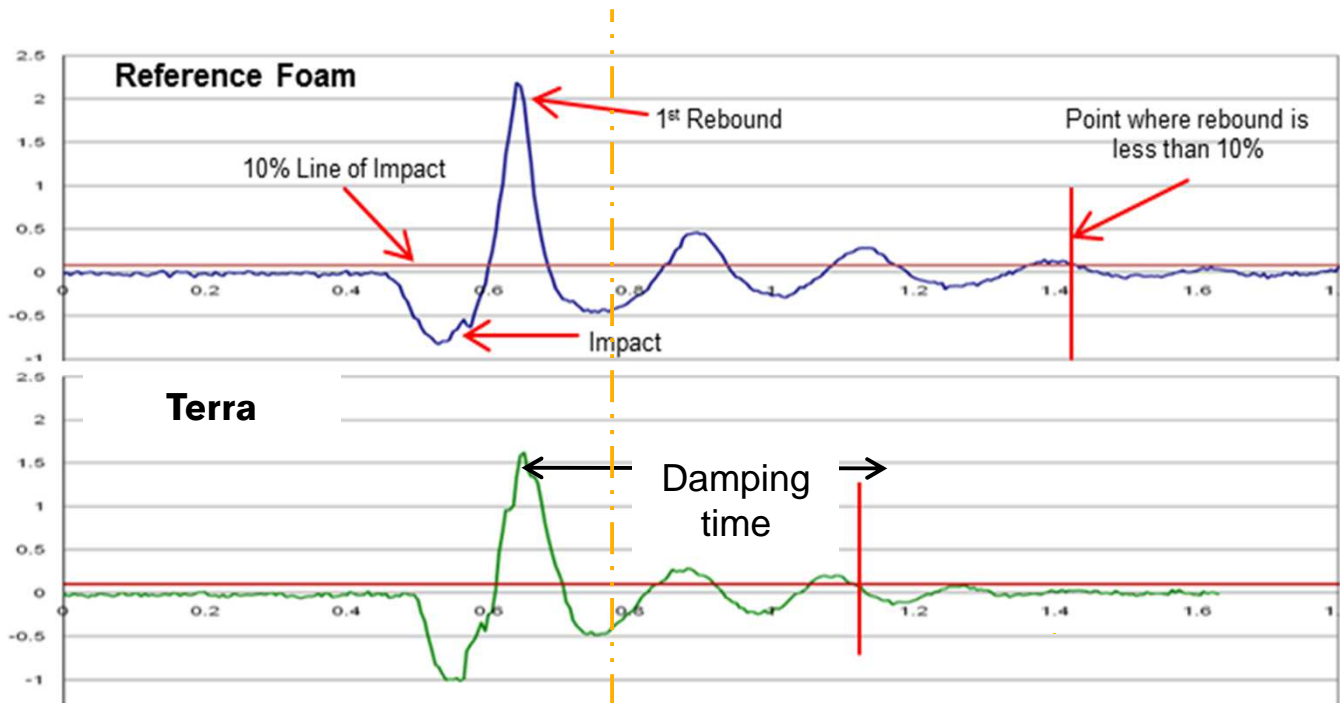
After 2 year and 6 year simulations – no significant changes.

Terra - Impact Damping

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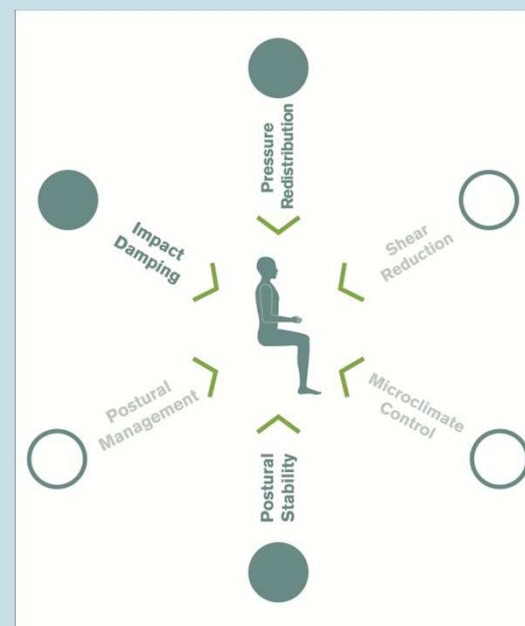


Impact Damping



Terra

- Durability
- Resistant to bottoming
- Postural support
- Superior immersion and envelopment
- Lateral stability
- Not affected by ambient temperature
- Good impact damping (shock absorption)



Aquos – Liquicell

- Reduces shear duration by 8%
- Reduces peak torque (rotational force) by 25%



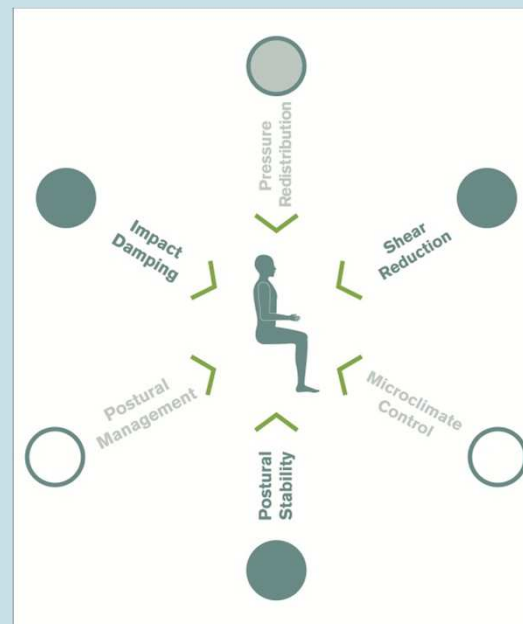
Torque (twisting) shear test using jeans



Denim Layer

Terra Aquos

- Durability
- Resistant to bottoming
- Postural support
- Good immersion and envelopment
- Lateral stability
- Good impact damping (shock absorption)
- Reduces Shear
- Lighter than fluid cushion (2.5kg)



Build It...

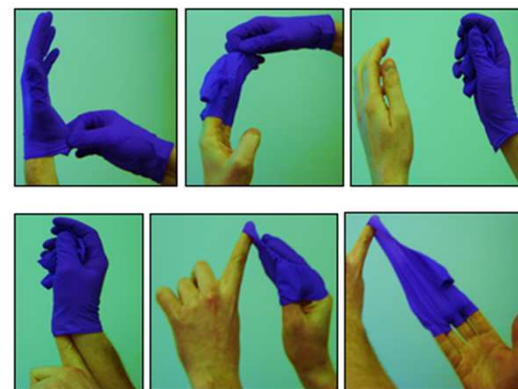


January 2014 - Incontinence Barrier



- 4 way stretch
- Pillow case design
- Welded seams
- Wipe clean/disinfect
- Clear to allow inspection of foam without removal

Like hospital gloves, the greatest risk of contamination with an incontinence cover is when an is being removed!



Thank you for your attention!



Quality for life