INTELLIBED RESEARCH ARTICLE 2

# Mattress Comfort & Pressure Relief Research

#### **BEST IN SUPPORT**



#### **BEST IN OUALITY**



**BEST IN SAFFTY** 



**BEST IN COMFORT** 



**BEST IN DURABILITY** 



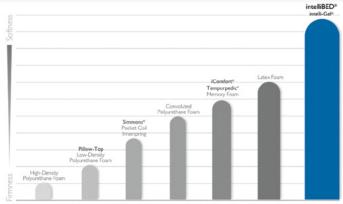
**BEST IN VALUE** 



Doctor's concerned about the spine told us that the "ideal" mattress should "push" the hips up into proper alignment to achieve proper sleep posture. Doctor's concerned with deep, healing sleep, however, helped us understand that this creates a pressure issue that can cause excessive "tossing and turning" robbing the sleeper of deep, healing sleep and causing pain. To combat this pressure, comfort layers are added to the modern mattresses. Their purpose is to relieve the pressure caused by the core support system, thus allowing the sleeper to fall asleep and awake in the morning without any aches or pains and without excessive tossing and turning during sleep.

#### Comfort Index

## How it comforts your hips & shoulders



Comfort / Pressure Relief Index

- The ideal mattress reduces pressure points
- Intelli-gel relaxes under pressure points
  - Reduces pressure up to 80% better than foam
  - Eliminates most tossing & turning
  - Optimizes deep, restful sleep

Source: Comparative Pressure Mappin



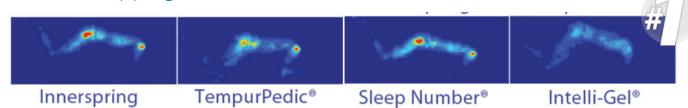


# **Mattress Comfort & Pressure Relief**

continued

What is the Comfort/Pressure Relief Index? This index rates the relative comfort provided by various types of commonly used mattress materials. Comfort in its traditional sense is very personal. Some like a firm bed, while others prefer a soft bed, so it is difficult to assess or "rate" comfort. But through sleep study research we know that when pressure causes the patient to move or toss and turn they must leave stage III & IV (deep, healing sleep) and move to level I in order to do it. We also know that when our central nervous system senses harmful pressure (34 mm/pressure for 5 minutes) it automatically signals our body to move. Knowing this, we can use sophisticated pressure mapping from the medical field to evaluate the relative ability of different cushioning materials to relieve the pressure points that force our body to move.

### Pressure Mapping



In this pressure map, you can see the type of pressure put on your body from a regular innerspring mattress, a memory foam mattress, a Sleep Number air mattress and an IntelliBED. We used the same person to show an accurate side by side comparison of the different mattress types.

The red spots show high pressure. You can see no red spots on the IntelliBED. That's because Intelli-Gel works like no other cushioning material to relieve pressure on your body and provide you with maximum comfort.

Over the years, IntelliBED has mapped thousands of individuals on all of the different mattresses and mattress materials available, and it is that data that allows us to rate the effectiveness of these materials on this chart. Each of these materials have a range of firmness. For example, foam is produced in different firmness levels from very soft to very firm. This chart does not take into consideration this range but seeks to only generally categorize the materials by their overall effectiveness to relieve pressure. For example, latex foam is almost always more effective at relieving pressure than polyurethane foam, so that is why it is rated above it in the chart.

It is very important to understand that the longer a mattress is used, especially one using synthetic foam in the comfort layer, the less effective it will be at relieving pressure. Every mattress manufacturer except intelliBED (whether Select Comfort, TempurPedic, Sealy, Simmons, Serta and all others) use FOAM as their primary cushioning material.

Durability testing shows that foam degrades, softens and develops body impressions with use. As foam degrades and softens, it loses its ability to cushion the body from the firm core below. That is why our hospital proven intelligel material is so vital to the construction of our intelliBED mattresses. Without it, we would not be able to deliver a wellness quality product.

