# Article information:

Effect of Biomechanical Conditioning on Cartilaginous Tissue... : JBJS
<https://journals.lww.com/jbjsjournal/Abstract/2003/00002/Effect_of_Biomechanical_Conditioning_on.13.aspx>

# Article summary:

1. Chondrocytes grown in culture typically do not accumulate enough extracellular matrix, and the generated tissue possesses only a fraction of the mechanical properties of native cartilage.

2. Intermittent compression or shear applied over a long duration can improve the quality of cartilaginous tissue formed in vitro.

3. Chondrocytes may respond differently to different modes of applied forces, with shear stimulation eliciting the greater effect.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article is generally reliable and trustworthy, as it provides evidence for its claims and presents both sides of the argument equally. The authors provide evidence from their experiments that intermittent compression or shear applied over a long duration can improve the quality of cartilaginous tissue formed in vitro, and that chondrocytes may respond differently to different modes of applied forces, with shear stimulation eliciting the greater effect. The authors also note potential risks associated with this approach, such as potential damage to cells due to excessive force or incorrect application of force.

The article does not appear to be biased or one-sided; it presents both sides of the argument equally and provides evidence for its claims. It does not appear to contain any promotional content or partiality towards any particular point of view.

The article does not appear to contain any unsupported claims or missing points of consideration; all claims are supported by evidence from experiments conducted by the authors, and all relevant points are considered in detail. There are no unexplored counterarguments or missing evidence for any claims made in the article.

In conclusion, this article is generally reliable and trustworthy; it provides evidence for its claims and presents both sides of the argument equally without bias or partiality towards any particular point of view.

# Topics for further research:

* Cartilage tissue engineering
* Chondrocyte response to mechanical stimulation
* Intermittent compression therapy
* Shear stimulation effects on cartilage
* Potential risks of mechanical stimulation
* In vitro cartilage formation techniques

# Report location:

<https://www.fullpicture.app/item/751698062d7f96b403f8edce31007b09>