# Article information:

The knowns and unknowns of neural adaptations to resistance training | SpringerLink  
<https://link.springer.com/article/10.1007/s00421-020-04567-3>

# Article summary:

1. Resistance training leads to neural adaptations in the initial stages (< 2–4 weeks) of training, which contribute to increased force production capacity.

2. Motor unit action potentials can be used to access the nervous system and provide direct evidence of neural adaptations at the level of individual motoneurons.

3. Advanced EMG recordings, such as intra-muscular or high-density surface EMG (HDsEMG), allow for precise identification of motor unit discharge times and demonstrate decreased motor unit recruitment threshold and increased discharge rate following resistance training.

# Article rating:

Appears strongly imbalanced: The article is written in a biased or one-sided way, and the information it provides is not trustworthy enough to be considered a reliable source. You should consult other sources to find reliable information on the presented issues.

# Article analysis:

该文章主要介绍了肌肉神经适应性对抗阻力训练的影响，但存在一些偏见和不足之处。

首先，文章没有充分考虑到其他因素对肌肉力量增长的影响，如营养、休息和基因等。其次，文章过于强调神经适应性的作用，而忽略了长期训练后肌肉形态改变的重要性。此外，文章未提及可能存在的风险和副作用，如受伤和过度训练。

此外，文章中使用的参考文献数量较少，并且大多数是早期研究。这可能导致作者未能全面评估当前对神经适应性的理解，并忽略了最新研究成果。

最后，该文章可能存在宣传内容和偏袒之嫌。例如，在介绍神经适应性时，作者只引用支持这种观点的研究，并未探索反驳意见或其他解释。此外，在介绍抗阻力训练时，作者强调其功能和生理益处，并未提及潜在风险或限制条件。

总之，该文章需要更全面、客观地评估神经适应性对抗阻力训练的影响，并考虑其他因素和潜在风险。同时，作者需要更广泛地引用最新研究成果，并避免宣传内容和偏袒之嫌。

# Topics for further research:

* Other factors affecting muscle strength growth
* Importance of muscle morphology changes in long-term training
* Potential risks and side effects of resistance training
* Limited and outdated references used in the article
* Biases and promotional content in the article
* Need for a more comprehensive and objective evaluation of the impact of neural adaptation on resistance training.

# Report location:

<https://www.fullpicture.app/item/406b72b74c8135c97b19f5c8473ff55c>