# Guideline for Researchers: Whisker/Vibrissae Barbering Behavior in Mice

Whisker/Vibrissae barbering behavior in mice refers to the abnormal removal of whiskers (vibrissae) or fur from themselves or their cage mates. This behavior, often exhibited as plucking or chewing, may arise from factors such as social dominance, stress, boredom, or genetic predisposition. However, other underlying causes may also contribute. While not inherently harmful, it can be indicative of underlying welfare concerns or environmental stressors. Additionally, whisker barbering may have significant implications for animal studies, as it can influence experimental variables and data integrity. Below are some of the key impacts:

1. **Sensory System Research**:
   Since whiskers are essential for tactile exploration and sensory input, their removal through whisker barbering disrupts tactile input and have consequences for brain organization and function. Whisker barbering can also lead to altered neurotransmission in the cerebral cortex and changes in neural plasticity. This may confound findings in neurophysiological research.

2. **Behavioral Research**:
   Barbering-induced sensory deprivation can influence behavioral outcomes, including exploratory, social, and anxiety-related behaviors. These changes may skew results in experiments focused on animal behavior, emotional regulation, or cognitive function.

3. **Stress-Related Research**:
   Whisker barbering is often linked to social stress or environmental factors. Mice exhibiting this behavior may show altered physiological or hormonal stress responses, potentially interfering with research on stress mechanisms, resilience, or pharmacological interventions.

4. **Broad Implications Across Disciplines**:
   While whisker barbering is most likely to affect studies in neuroscience and behavior, its influence can extend to any research relying on healthy, unstressed animals.



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**Mitigation Strategies:**
Researchers should account for whisker barbering as a potential confounding variable by:

- Excluding barbered animals from studies where sensory input or stress-free conditions are critical.
- Include information on whisker barbering behavior in research articles to ensure transparency and reproducibility.
- Designing experiments to control or account for the effects of whisker barbering in statistical analysis.

By recognizing and addressing the potential impacts of whisker barbering, researchers can safeguard the validity of their findings and contribute to better animal welfare practices.

**References**


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