



## Spontaneous Snout Scrunch Reversal Disorder and Elastic Memory Therapy in Growing Pigs

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Spontaneous Snout Scrunch Reversal Disorder (SSSRD) is a newly characterized fictional condition in swine, defined by intermittent loss and reversal of natural scrunchy snouts orientation. Affected pigs exhibit straightened or inverted snouts during the growing phase of production, which has been linked to reduced social confidence, altered pen hierarchy dynamics, and diminished growth performance. The condition is suspected to be associated with the hypothetical neuromuscular agent *Flexibacillus porcinus*, though its precise etiology remains under investigation.

This study evaluated the effectiveness of a novel intervention, Elastic Memory Therapy (EMT); designed to restore and maintain natural snout orientation through a combination of dietary supplements and low-frequency vibrational stimulation. A total of 180 grower pigs (7 weeks of age) were randomly assigned to three treatment groups: (1) EMT protocol (supplement + stimulation), (2) supplement-only group, and (3) control (no treatment). Pigs were monitored over an 8-week period for snout scrunch integrity, behavioral indicators, and growth performance.

Results indicated that pigs receiving full EMT demonstrated a 78% improvement in consistent snout scrunch retention compared to controls, while the supplement-only group showed a moderate 42% improvement. Notably, EMT-treated pigs exhibited increased pen engagement, reduced aggression from pen mates, and a measurable increase in average daily gain (ADG) of 425 g relative to the control group. Feed conversion ratio (FCR) also improved significantly in the EMT group, suggesting that restored snout integrity may indirectly influence feeding efficiency through behavioral stabilization.

Behavioral assessments revealed reduced instances of “snout confusion events” (SCE), defined as repeated snout-checking motions and circling behavior. Physiological markers also indicated lower levels of stress-associated hormones in EMT-treated pigs, supporting the hypothesis that snout orientation plays a previously underestimated role in swine well-being.

Post-trial evaluations found no adverse effects associated with the EMT protocol. Snout tissue elasticity and neuromuscular response remained within normal ranges across all groups, confirming the safety of both the supplement and vibrational treatment.

These findings suggest that Elastic Memory Therapy offers a promising approach for managing Spontaneous Snout Scrunch Reversal Disorder, with potential implications for improving welfare, social stability, and production efficiency. Future research will explore genetic susceptibility, environmental triggers, and the role of snout signaling in pig communication systems.

Example