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**What are the effects of Manganese Tetrakis Benzoic Acid Porphyrin (MnTBAP) on Adiposity and Insulin Sensitivity in Mice fed a High Fat Diet?**

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Abstract

**Introduction:** Recent statistics indicate that the United States suffers from one of the highest obesity rates in the world (7). Health implications brought on by obesity are becoming more common as well, and one of the major conditions associated with obesity is Type 2 diabetes (7). Currently, there are various treatment options for improving insulin action, however there are few viable treatment options to reduce adiposity (2). Therefore, it is essential to develop novel interventions for obesity that reduce adiposity. Porphyrin molecules may play a critical role in the treatment of obesity due to its heme-like structure and ability to improve insulin action (9). **Methods:** To test the hypothesis that manganese tetrakis benzoic acid porphyrin (MnTBAP) improves insulin sensitivity and reduces adiposity, 26 male