Tuberculosis (TB) has been reported to have the fifth highest fatality rate in the world, a disease claiming between 2 and 3 million lives a year. One of the important reasons why this killer parasite is spiraling out of control at an alarming rate is attributed to the prevalence of multidrug-resistant (MDR) strains and emergence of AIDS-related TB. Focus has now been shifted towards development of compounds from natural sources that have antimycobacterial activity. The incorporation of such compounds, like polyphenols namely Epigallocatechin-3-gallate (EGCG) from green tea, as the natural component of tuberculosis treatments has been studied here. Reactive oxygen species and tumor necrosis factor (TNF-) are the hallmarks of tuberculosis. The augmented expression of TNF- at both the gene and protein levels in MTB-infected monocytes is suppressed by EGCG in a dose-dependent manner. Also, EGCG ameliorated the IFN- levels, the glutathione peroxidase activity, which correlated inversely with the downregulation of ROS and TNF- in MTB-infected monocytes. Hence, EGCG may prove to be a valuable natural antioxidant in tuberculosis management.

- The National Domain in Canada and Its Proper Conservation
- The National Park Service: Its History, Activities, and Organization
- Natural Disasters: Fire and Flood, Hurricanes and Tornadoes, Volcanoes and Earthquakes
- Native American Programs ACT
- Nationalist Democratic Action