**Abstract:** Oxidative stress has been a major predicament of present day living. It has been the product of imbalance between the processes involved in free radical generation and their neutralization by enzymatic and non-enzymatic defense mechanisms. The oxidative stress has been contributed by numerous factors including heavy metals, organic compounds rich industrial effluents, air pollutants and changing lifestyle pattern focussing mainly on alcohol consumption, dietary habits, sun exposure, nuclear emissions etc. The most common outcome of oxidative stress is the increased damage of lipid, DNA and proteins that resulted in the development of different pathologies. Among these pathologies, cancer is most devastating and is linked to multiple mutations arising due to oxidative DNA and protein damage that ultimately affect the integrity of genome. The chemopreventive agents particularly nutraceuticals are found to be effective in reducing cancer incidences as these components have immense antioxidative, antimutagenic and antiproliferative potential and are important part of our dietary components. These secondary metabolites, due to their unique chemical structure, facilitate cell to cell communication, repair DNA damage by the downregulation of transcription factors, inhibit the activity of protein kinases and cytochrome P450 dependent mixed function oxidases. These phytochemicals, therefore, are most appropriate in combating oxidative stress related disorders due to their tendency to exert better protective effect without having any distinct side effect.

**Response to Reviewers:** Answer to Reviewer’s Comments:
Ref.: Ms. No. ESPR-D-13-01145R1
Oxidative Stress: Implications, Source and its Prevention
Environmental Science and Pollution Research

Comments of Reviewer 1:
Mention sound description in the Introduction section. Describe the basic mechanisms of oxidative stress generation and its consequences.

Ans: In the Introduction section, following additions are made:
ROS including superoxide anion radicals (O2.-), hydrogen peroxide (H2O2) and...