Chapter 8
Conclusion
The present study established that whole body gamma radiation exposure (single dose of 5 Gy) developed specific as well as systemic stress such as damage to the cell membrane and DNA; hematopoietic system as well as to the reproductive organ (testis). This study also confirmed that irradiation exerted hepatic oxidative stress which ultimately leads to hepatic inflammation. Thus, a successful development of radiation stress model was developed.

Moringa leaves, the common vegetable, have certain health benefits which are enriched with certain phytocomponents like polyphenols, ascorbic acid with antioxidant properties. Pre-treatment with MoLE offered protection against gamma radiation.

Two major components of MoLE, quercetin and epicatechin were identified by HPLC, possessing strong antioxidative potential.

These phytocompounds showed excellent radioprotective effects in terms of every aspect of radiation mediated damages. Therefore it can be concluded that MoLE, quercetin, epicatechin and diet rich with these two phytoc ompounds might be considered as a promising radioprotective agent especially for the nuclear workers and for defence personnel assuming possibility of radiation exposure. However, more concerted efforts through coordinated research can make a significant difference to human health in this regard.