Chapter 7

Conclusion

1. BPA impairs the haematological and cardiovascular function by:
   (i) suppressing the erythropoietic system,
   (ii) enhancing the cardiovascular risk factors through increasing the
        levels of serum calcium, glucose, total protein and lipid profile
        conducive for cardiovascular risk,
   (iii) increasing the activities of transaminases, and
   (iv) inhibiting the cardiac function through
        (a) promoting the oxidative stress induced ventricular tissue injury
            due to decreased activities of antioxidant enzymes and enhanced lipid
            peroxidation of cell membrane,
        (b) inhibiting the activity of acetylcholinesterase (AChE) at the
            acetylcholine binding sites at the cardiac cell membrane,
        (c) promoting the production of NO presumably by activating the
            nitric oxide synthase (NOS) activity and promoting the production of
            cGMP, the end biomolecule, in the NO linked second messenger
            pathway in the cardiac cells by activating guanylyl cyclase,
        (d) lowering the availability of free Ca\textsuperscript{2+} in the ventricular
            myocytes by causing chelation of Ca\textsuperscript{2+} and inducing the formation of Ca\textsuperscript{2+}
            plaques in the cardiac cell.

2. Vitamin C can ameliorate the degree of BPA induced oxidative stress by
   lowering the inhibition of the antioxidant enzyme activity and preventing the
   peroxidation of membrane lipids.

Thus, the outcomes of the results may be extrapolated to the physiological systems
of human beings also.
Bibliography


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