



Animal Products as Potent Sources of Drug Materials

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Abstract: The terrestrial and marine ecosystems remain nature's most efficient synthetic laboratories, as they biosynthesize natural products for the survival and healing of mankind and generate renewable industrial and medical chemicals for the wealth of the nations. Animal products like its plant counterpart have been exploited throughout history to treat human ailments and develop medical tools. Their usage phenomenon is marked by a broad geographical distribution across all continents. There was a lull in the use of animal products as potent sources of raw materials for drug development and much scientific attention was not given to them in the later part of the 20th century perhaps due to the concern about their extinction. However, there is a current resurgence in the use of animal products especially of the marine ecosystem. An increasing number of novel marine natural products are reported in the literature every year, indicating that the marine environment is likely to continue to be a prolific source of new natural products for many years to come. The uniqueness of animal products lies in their close proximity to man's biochemical nature, specificity of biosynthesis and the fact that metabolites does not grossly alter with change in environment as animals are feed specific. By subtly modifying natural molecules from the animal and from plants then spicing it with earths minerals, man evolves potential treatments for debilitating diseases, and feed the over six billion members of our planet. Though numerous infectious diseases can be transmitted from animals to humans the tangible benefits of animals products as potent sources of drug materials outweighs the challenges. This review is a time band overview of the use of animal products as potent sources of drug materials for drug development.

Key words: *Animal products, folk medicine, marine natural products, bioactive compounds, and drug development.*

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