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### Biosensing Mediated Therapeutic Regimes for a Balanced-Cure to Imbalances of Life Processes

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In living systems, any deviation from homeostatic state of steady internal physical and chemical conditions falls under category of diseases. Such deviations are required to be identified at very early stage to have high chances of bringing them back to normalcy with therapeutic interventions. These identifications can be achieved through process of biosensing. The outcomes of biosensing can be classified into categories of information like if disease is initiating, what is progression of disease, which drug might be better suited for the condition, what should be the drug dose and whether therapy has started working in right direction. This information would help in deciding on therapeutic regime in an identified disease condition. In absence of such information, therapeutic regimes generally use trial and error methods to solve the problem, if identified at all via external symptoms, or given higher doses of the drug to cause secondary damages to the body through severe side effects.

Human body responds to any deviation in homeostatic condition by changing the level of various biomolecules which could be concentrated locally or might release in body fluid system. Simpler collection method for biomolecules from different non-invasively accessible bodily fluids e.g. saliva, urine, sweat etc., makes them preferential for advance biosensing processes. Additionally, development of biosensing surface using more stable, economical, easy to handle, high specificity and sensitivity materials is desirable for high success and better reach to patients. In recent past it has been achieved using paper based sensors coated with carbon allotrope-polymer-based composites. Thus, use of a non-invasively acquired body fluid for detection of disease and its severity, by paper based carbon-polymer composite sensor can provide a balanced-cure for different imbalances of life processes.