



## HYDROGELS: AN INTELLIGENT CARRIER FOR TARGETED DRUG DELIVERY

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### ABSTRACT

Targeted drug delivery is an advanced method of delivering drugs to the patients in such a targeted sequences that increases the concentration of delivered drug to the targeted body part of interest only (organs/tissues/ cells) which in turn improves efficacy of treatment by reducing side effects of drug administration. Hydrogels are high-water content materials prepared from cross-linked polymers that are able to provide sustained, local delivery of a variety of therapeutic agents. Hydrogels are under investigation as a delivery system for bioactive molecules, because of their similar physical properties as that of living tissue, which is due to their high water content, soft and rubbery consistency, and low interfacial tension with water or biological fluids. Many hydrogel-based networks have been designed and fabricated to meet the needs of pharmaceutical and medical fields. This review encompasses the use of hydrogels as intelligent carriers for targeted drug delivery.

**Keywords:** Hydrogels, carrier, targeting, drug delivery