# Clove as Personalized Medicine in Diabetes

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**Abstract:** Culinary herbs and spices were wide used as a standard medication within the treatment of hereditary disease and its complications, and there are many scientific studies within the literature supporting the utilization of these medicative plants. But there was usually an absence of knowledge on the bioactive compounds of these herbs and spices and their mechanisms of action. The aim of this study was to use in inverse virtual screening to provide insights into the bioactive compounds of common herbs and spices, and their potential molecular mechanisms of action within the treatment of congenital disease. Over 900 compounds from the herbs and spices library square measure ascertained to possess potential anti-diabetic activity and cloves square measure ascertained to be notably enriched with potential anti-diabetic compounds. An outsized share of the compounds square measure ascertained to be potential poly-pharmacological agents regulation 3 or additional anti-diabetic drug targets. The foremost for the herbs and spices compounds unit dipeptidyl peptidase-4 (DPP4), viscus maltase-glucoamylase (MGAM), liver receptor homolog-1 (NR5A2), secretory organ alpha-amylase (AM2A), peroxisome proliferator-activated receptor alpha (PPARA), super molecule organic compound enzyme non-receptor sort nine (PTPN9), and retinol binding supermolecule-4 (RBP4) with over 250 compounds square measure ascertained to be potential inhibitors of these explicit protein targets. solely bay leaves, liquor ice and thyme square measure found to contain compounds that might probably regulate all eighteen super molecule targets followed by black pepper, cumin, dill, hops, cloves and marjoram with seventeen super molecule targets. In most cases quite one compound at intervals a given plant might potential a explicit super molecule target. it absolutely was ascertained that through this multi-compound-multi target regulation of these targets that the foremost the foremost of reduced symptom and symptom of the herbs and spices would be explained.

**Keywords:** herbs; spices; anti-diabetic; DIA-DB; virtual screening; sesquiterpenoids; flavon oids

## Review article

This chapter is basically represent the past research on the study of phytochemicals present in the clove. It contains the study of abundance of phytochemicals in clove. Their nature towards various diseases specially about diabetes. This chapter contains the following headings:

- Historic background about clove
- Study of phytochemicals found in clove
- Related diseases
- Basic study of diabetes
- Techniques used for in current scenario
- Effect of phytochemical on diabetes

### Historic background about clove :

Evidence of cloves has been found at Terqa. Cloves were traded by Omani sailors and merchants and Africa during the center ages within the profitable ocean trade.

Cloves are the aromatic flower buds of a tree within the family Myrtaceae, clove. They're native to the Maluku Islands in Indonesia are commonly used as spice. These compounds help our body