



## Genetically modified products – Boon or bane?

### Description

#### Background :-

- Agricultural Biotechnology is the area of bio-technology involving applications to agriculture.
- In Agricultural biotechnology, cross-breeding of plants used to be done to get desired results such as disease resistant plants and to increase crop productivity etc.
- In the 1970s scientists were succeeded to manipulate DNA at molecular level through molecular biotechnology. DNA is the chemical building block, which specifies the characteristics of living organisms. And this technology is called as genetic engineering.
- The foods developed from this technology are called as “genetically modified products”™ or “GMO foods”™ or “Biotech foods”™.
- Through genetic engineering, we can take genes from any organism and can introduce these genes into another organism instead of cross-breeding several times to get the desired results.

#### In Favor :-

- Increased crop productivity.
- Instead of using pesticides, we can induce insecticides in plants, which is cost effective. By this crop protection increases.
- We can improve nutritional value of foods by inducing the genes of high protein and vitamin contained foods.
- We can improve the flavor of foods.
- Through genetic engineering, we can prevent decay, damage, ripening of foods and loss of nutrients up to few days. So transport of foods become easier and consumers can take fresh foods.
- As genetic engineering reduces the use of pesticides, it is a boon for environment, ground water and for farm workers also.
- In developing countries poor people can’t afford vitamin supplements. By genetic

