



Mock Meat- The need of the Hour

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Meat is a very rich source of protein in human diet. The consumption of meat or animal flesh is being carried out from the Stone Age when man first used stone as his weapon. But in the current scenario the tremendous increase in slaughtering and consumption of animals has led to unnoticeable disturbances in ecological balance. Excessive consumption of meat has also led to several diseases. It has been found vegans are less prone to diseases. In order to deal with such issues, meat alternatives or mock meat are being introduced in the market. The article highlights the concept of meat, meat alternatives, different meat alternatives used, need for such alternatives and the method of their production.

Meat is the flesh or tissue of animal carcass (dead body of animals that has been slaughtered) that can be served in the form of food. Meat is generally eaten by people for its delicious taste and also because it is a good source of protein, carbohydrate, energy and several minerals and vitamins. Due to these reasons, the number of people consuming meat rich diet has also increased. The country which consumes the highest meat globally is Hong Kong SAR and is followed by Australia and USA. On the contrary, the least meat consuming country globally is India followed by Bangladesh and Gambia³. The general composition meat is as depicted in Table 1 given below.

Table 1. Nutritional composition of Meat per 100g

SN	Parameters	Composition (per 100 g)
1	Moisture content or water	75% and above
2	Proteins	19 to 20%
3	Fats	5 to 7%
4	Vitamins	Vitamin B1,B2, B12, B6 and Vitamin A
5	Calories	143 Kcal

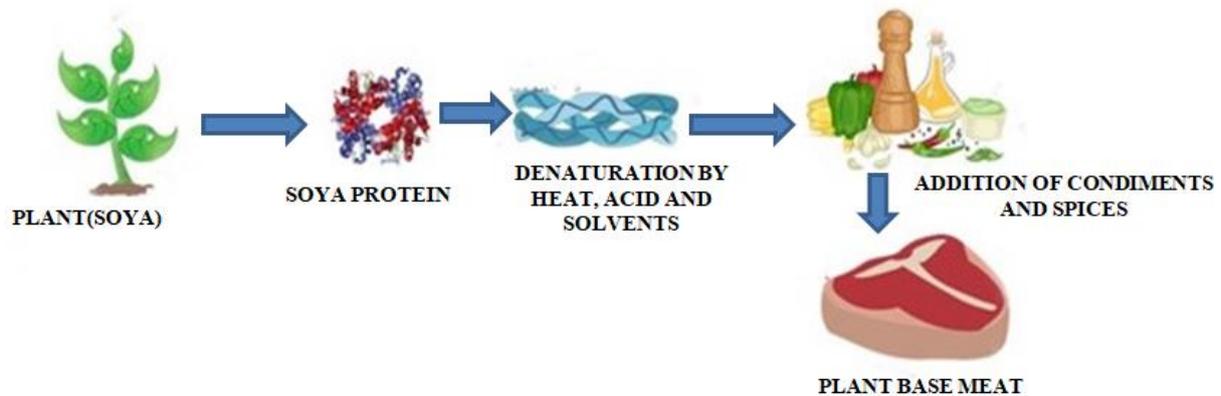
To feed the meat eating population, more and more meat processing and animal rearing industries have emerged. But in the current scenario, hunting of animals has caused decline in the number of animals which also causes ecological misbalance. So as an alternative to animal meat, a new concept of plant based meat alike products has been introduced to the market. They are commonly known by different names such as meat analogues, mock meats and meat alternatives.

Meat analogues or Mock meat

Meat analogues are commonly known as mock meat, faux meat and imitation meat. They are derived from textured vegetable or plant proteins primarily soya based, potato based, pea based. They substitute meat products and provide an economical, functional and high-protein food ingredient like meat. Meat analogues are becoming popular because of their low cost, still having meat like texture and taste whereas healthier as is free from bad cholesterol¹. Many of us may think whether mock meat is efficient enough to resemble the fibrous structure and taste of meat. The answer is yes. Mock meat is efficient enough to resemble the taste and texture of actual meat. It can be done by “moisture extrusion process” where in the globular or powdery texture of plant protein is



converted to fibrous structure by exposing soy protein to acids, high heat and solvents. It is then re shaped by the help of extruder which actually resembles the meat².



Activate

Production of mock meat is environment friendly. Mock meat production requires lesser quantity of water usage. Thus, it is beneficial from all sides.

Conclusion

Meat is the flesh or tissue of any animal which is consumed as food. Due to environmental issues which arise due to killing of animals and health issues due to ill effects of meat consumption mock meat or vegan meat is getting popular. They almost resemble the actual meat in taste, texture and composition, the only difference is of the base material. More and more research needs to be carried to make the vegan meat closest to the real meat. This will lead to a healthier people and environment.

References:

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