

## Value Added Meat Products

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Meat is marketed in the country in various forms and conveniences to suit the consumer's choice. The main stumbling block in the marketing of meat and eggs products being of high biological value, have a special role to play in developing countries of Asia and Africa where malnutrition and protein deficiency are two major problems. As such much emphasis has been given to intensify research in developing appropriate and relevant technologies of these products to suit our conditions. The use of meat and eggs on development of convenience products is emphasized due to better nutrient contents like high quality protein, vitamins, minerals, essential amino acids, fatty acids and lower calorie content. Today's consumers are no longer satisfied with the traditional meat products. Rather they prefer more nutrients and convenient ready to eat meat products. These convenient items must be economical and cost-effective and interesting changes of menu besides better in shelf-life quality and acceptability than traditional products.

During the starting of 21st century demand for meat has been grown strongly. Specially in developing countries of Asia where is heavy industrialization and globalization which stimulated growth of per capita income and up-gradation of living standard which has widen the demand for the more convenient meat products and it is amplified by population growth in developing countries. Also mobilization of supplies to distant area's consumers raises the major problem in meat industry. During 2004 -2005 only 2% meat is utilized for processed meat industry and per capita consumption of meat (chicken) is 1.5 kg and 44 eggs per annum against the world average of 10 kg chicken and 102 eggs (Sharma, 2006). Thus there is scope in development of processed meat industry specially value added meat products in order to cater the need of urban population, which consume 70 to 75 % meat products (Singh, 2004).

The United States Department of Agriculture defines value added products as

- 1) A change in the physical state or form of the

products and production of a product in a manner that enhances its value as demonstrated through business plan.

- 2) The physical segregation of commodity or product in a manner that result in the enhancement of the value of that commodity or product.

Traditionally value can be added by packaging of meat product in appealing material, these packaging material help to extend the shelf life, then by broker and retailer by building a wide business and retailing chain. But now increasing demand of meat products specially more convenient, ready to cook, ready to eat and more nutritious. So the strong need arise for value addition in other sense of nutritional value and healthiness like low-fat and low cholesterol considering its cost, which can be minimized by addition of non-meat ingredient or vegetable source such as soy-protein, cereals, milk-protein and in some products utilization of spent hen meat.

### Economics of Value Addition - Chicken *Burger, Patties and Nuggets* (Poultry Year Book 2003-04)

- 1) Processed yields from live birds = 68%

1475 gms Live wt.= 1kg dressed bird.

- 2) Dressing Percentage

Part of Body	%	Quantity (g)
Drum sticks	13	130
Breast fillet + Thigh meat	30	300
Small meat pieces	5	50
Wings 3 pieces	12	120
Skeleton	30	300
Thigh bone	4	40
Skin	4	40
Shrinkage / wastage	2	20

### Market for Value Added Meat Products

Chicken *sticks, chicken patties, burger, kabab, nuggets, roll, chicken samosa, canned chicken* and other snacks type products are popular in local market. But now a day's big player of market are launching their products mainly ready to eat and ready to cook type. In fast food or snacks type meat products *burger, patties, puff, sticks* and meat *pizza* are also available through franchisee chain of

**3) Cost of Dressed Meat for use in ready to eat products (Assumption cost of 1475 g live bird @ 50 Rs/Kg = 73.75 Rs.)**

Part of dressed chicken	Processed Yield(g)	Sale price/kg	Realization price(Rs.)
Drum sticks	130	110	14.30
Wings 3 piece	120	75	9.00
Skeleton	300	40	12.00
Thigh bone	40	20	0.80
Skin	40	20	0.80
Deboned meat	350	105	36.75
Total Rs.		73.65	

**4) Formulation and cost of production / kg of Chicken-Burger and Nuggets**

Product	Quantity(gm)	Price/Kg	Totalcost (Rs)
Deboned meat	700	105	73.50
Binder	100	30	3.00
Fresh spices, Onion etc.	100	20	2.00
Onion etc.			
Salt and dry spices	60	100	6.00
Bread crumbs	40	100	4.00
Oil for cooking			4.00
Total			92.50
Production Overheads			7.50
Gross Production Cost			100.00
Production cost of 100 g Chicken Patties			10
Selling price per patties			15
Gross profit per patties			5

multinational companies like MacDonald's and Pizza-Hut. In local market Chienies and Kabab centers are playing major role in value added meat business. Big players like Godrej, Venkey and Tasty-Bite are having their products like ready-to-eat - *Butter chicken*, *Chicken Kheema*, *Chicken Franks*, *Chicken Steak*, *Chicken Pickle*, *Sausage*, *Chicken Salami*, *Salami Slices* and in easy-to-cook products - *Cutlets*, *Nuggets*, *Fingers*, *Burger Patty*, *Samosas*, *Chicken Burger*, and ready-to-cook type *Boneless chicken*, *Chicken Breast*, *Chicken Legs*. In last decade the processing scenario has changed and there are more companies in the both segment (Indian and Overseas) than before. Some companies and their brands also disappeared during this time as they can't match the market trends and strategies.

Global meat production has increased more than fivefold since 1950 and more than doubled since the 1970s. Total meat production in developing countries has grown by 5.4 percent per year between the early 1980s and mid 1990, more than five times the developed world rate. In India also, during last 25 years, the compound average growth rate for two decades remained 4.6% but reached 21% in the last 5 years indicating it as the fastest growing segment of livestock sector (Sharma,2006). Meat processing

sector, particularly value added poultry segments needs to be vigorously promoted for boosting production by increasing the domestic consumption of processed products and also for promoting their export. Family dynamics, rising income, increasing exposure to various mass media, changing food habits with preference for fast foods and heavily industrialization and urbanization will greatly enhance the demand for fresh or frozen and nutritionally superior value added products. Policy makers, meat producer cum processor, food processor, food technologist etc have to work together to transform this sector into a more dynamic and vibrant enterprise.

**References**

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