

Technology available for Commercializaation

GOAT FEEDERS FOR BETTER FEED UTILIZATION

Goat feeders are suitable for feeding concentrates, dry and green fodders simultaneously, thereby reducing the cost of labor and feeding time under semi-intensive and intensive goat production systems. The technology has been effective in reducing feed wastage (from 35-40% in conventional ground level feeding method to 5-10%) and chances of contamination of feed with animal excreta. The rectangular feeder can accommodate 10-12 goats, whereas hexagonal feeder can feed 12-15 goats.



PELLETED COMPLETE FEED TECHNOLOGIES

Declining feed and fodder resources and grazing area is a major challenge to goat rearing. CIRG has developed complete feed technologies to cater to the nutritional requirement of goats for Sustainable Goat Production under intensive feeding system. The technologies include tree leaves based complete feed pellets and monsoon herbage based complete feed pellets. Different combinations of dry leaves have been used with concentrate mixture in specified ratio.



BRUCHECK: A DOT-ELISA KIT FOR DETECTION OF BRUCELLOSIS

The brucellosis in goats and sheep exclusively caused by *Brucella melitensis* and there is no diagnostic kit available in India which can exclusively detect brucellosis in goats and sheep. This dot-ELISA kit detects antibodies to *Brucella melitensis*.



STRESSOL-G : AN HERBAL ANTISTRESS FORMULATION

This polyherbal formulation was developed by a three plant extracts. This formulation can be used to ameliorate heat & cold stress in animal, thus maintain production of animals. This powder can be used as feed mix.



INTRAVAGINAL PESSARIES FOR OESTRUS SYNCHRONIZATION IN GOATS

CIRG Intravaginal pessary relate to oestrus induction in an oestrus goats, shortening the post-partum interval, oestrus synchronization, more frequent kidding, increase in litter size in less prolific breeds, extending mating outside the normal breeding seasons.



Commercialized Technologies

ALQUIT (HERBAL ECTOPARASITICIDAL DRUG)

For treatment and control of ecto-parasites viz
Ticks and Lice in livestock

Commercialized by :

M/S Natural Remedies Private Limited under the
Trade Mark "Alquit".



AJAS (GOAT MILK BASED BEAUTY SOAP)

The technologies of AJAS- Beauty Soap, AJAS-
Green soap and AJAS- Antiseptic soap developed
by ICAR – CIRG.

Commercialized by :

M/S B.V.G Life Sciences Ltd, Pune.



HERBODIN (HERBAL ANTIDIARRHOEA POWDER)

Herbal anti-bacterial anti-diarrhoeal powder for
management of diarrhea in animals

Commercialized by :

M/s Girraj Industries, Sirsaganj, U.P..



HEALEX-FR (HERBAL SKIN ANTISEPTIC GEL)

An ointment/gel for external injuries, septic &
maggot wounds management in animals

Commercialized by :

M/s Girraj Industries, Sirsaganj, U.P. under the
Trade Mark "HEALEX-FR".



GMIN FORTE (AREA SPECIFIC MINERAL MIXTURE)

Areamix-area specific mineral mixture for Uttar
Pradesh for management of mineral deficiency
and optimizing production in animals

Commercialized by :

M/s Girraj Industries, Sirsaganj, U.P. under the
Trade Mark "GMIN".



GOAT MEAT NUGGETS

Comminuted processed meat product consisting of minced meat, seasoned with spices and condiments, blended with vegetable oil, containing Poly Phosphate and nitrite. The batter is filled into molds, cooked under pressure, cut in to 4 cm cubes and heat-sealed in PE bags for storage and sale.

Nutritional information: Protein -15%; Fat -12%; Saturated fat -7%; MUFA -3%; PUFA -2%; Omega 3 FA - 0.12%; Cholesterol (mg/g) -1.34

Shelf life : Refrigeration -10days; frozen -120 days



HERBAL GOAT MEAT NUGGETS

Processed emulsion based meat food products prepared by the use of herbal plant materials and extracts. The resultant product will have immune-modulating effect on human health.

Nutritional information : Protein -15%; Fat -12%; Saturated fat -7%; MUFA -3%; PUFA -2%; Omega 3 FA - 0.13%; Cholesterol (mg/g) -1.32

Shelf life : Refrigeration -10days; Frozen -120 days



GOAT MEAT SAUSAGES

Sausages are getting popularity in Indian market especially as a fast food in big cities. This is a comminuted processed meat product consisting of minced meat, seasoned with spices and condiments, blended with vegetable oil, containing Poly Phosphate and nitrite and enclosed in goat casings and cooked (internal temperature 70-72°C)

Nutritional information : Protein -14%; Fat -12%; Saturated fat -6%; MUFA -4%; PUFA -2%; Omega 3 FA - 0.09%; Cholesterol (mg/g) -1.42

Shelf life : Refrigeration -10days; Frozen -120 days



GOAT MEAT NIMKEE

The invention generally relates to add value to the goat meat and more particularly for the fast food restaurants. Goat meat Nimkee will have more animal protein and also maintain the status of snack food. The product is packed in modified atmospheric packaging method and can be kept under room temperature.

Nutritional information : Protein -14%; Carbohydrate -44%; Dietary fibre -6%; Fat - 23 %; Saturated fat - 8.13% MUFA- 2.34%; PUFA - 22.43%; Omega 3 FA - 4.39%

Shelf life : 4 months at room temperature



GOAT MEAT MURUKKU

The product is an eye-opener for the small scale industrialists who are dealing with meat products. The invention generally relates to add value to the meat and more particularly to use this for the preparation of Goat meat Murukku: a crispy food product. The product will be an alternative to the junk foods available in the market which are only the source of carbohydrate and fats. There is an intervention in the traditional popular product with the touch of science.

Nutritional information :

Protein -16%; Carbohydrate -53%; Dietary fibre -8%; Fat -21%; Saturated fat -3.88%; MUFA - 4.57%; PUFA - 23.76%; Omega 3 FA -4.82%

Shelf life : 4 months at room temperature



GOAT MILK POPS

Technology relates to add value to the goat milk and produce snack milk food product. Cereal pops have milk protein and also maintain the status of snack food. The product is packed in modified atmospheric packaging method and can be kept under room temperature.

Nutritional information : Protein - 8.65%; Carbohydrate -55%; Dietary fibre -3%; Fat - 30%; Saturated fat - 23.29%; MUFA -4.12%; PUFA -8.77%; Omega 3 FA- 3.77%; Omega 6 FA -4.99%

Shelf life : 4 months at room temperature



GOAT MEAT PATTIES

Patties are one of the most liked ready to eat comminuted meat product, enjoying the highest degree of preference among the consumers owing to ease of preparation. This is lightly spiced product prepared using batter comprising of minced spent goat meat, refined vegetable oil, refined wheat flour, spices, condiments, and phosphates (0.3 %), molded to round shape and oven cooked (180°C for 25 min to an internal temperature of 78-80°C)

Nutritional information : Protein -14%; Fat -10%; Saturated fat -5%; MUFA -3%; PUFA -2%; Omega 3 FA - 0.18%; Cholesterol (mg/g) -1.42

Shelf life : Refrigeration -10days; and frozen -120 days



MEAT SHAMI KEBAB

Kebabs are popular traditional meat products and have good scope as a fast food in India and other countries. The SPC, psychrotrophs, yeast and mold counts of cooked product were log 4.83, 2.70, <1.00

CFU/g sample. The Standard plate counts in Kebabs were log 4.36, psychrotrophs log 3.66, and yeast and mould counts log 1.81 CFU/g and well within permissible limits.

Nutritional information : Protein -25%; Fat -14%; Saturated fat -7%; MUFA -5%; PUFA -2%; Omega 3 FA -0.09%; Cholesterol (mg/g) -2.72

Shelf life : Refrigeration -14days; Frozen -90 days



MEAT/MILK BISCUITS

Biscuits are popular food product but product with animal protein especially meat protein is not available. Use of ayurvedic or herbal plant materials and extracts in the processing of meat to produce herbal meat biscuits with growth promoting and immune – modulating effect.

Nutritional information : Protein -14%; Carbohydrate -55%; Fat -21%; Saturated fat - 5.62%; MUFA - 11.38%; PUFA - 5.81%; Omega 3 FA - 0.21%

Shelf life : 6 month at room temperature.



GOAT MEAT PICKLE

It is a shelf-stable Protein rich value added product prepared using precooked spent meat, common salt, dry and green spices, mustard oil, acetic acid, citric acid, cane sugar and packed in pet bottles. Technology, which is based on traditional taste and method, is expected to be readily acceptable by even small-scale meat processors/entrepreneurs. It is acceptable for 3 months at ambient temperature and pH value is 4.77. The SPC and halophiles counts were log < 4.00 and yeast and mould counts were below log 1.00 CFU /g. The yield on slaughter weight, carcass weight and separated meat basis were 23.34, 58.93 and 102.83 % respectively.

Nutritional information: Protein -12%; Fat -18%;

Shelf life : 60 days at room temperature



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