

## FORMULATION in EXTRUSION



Nowadays, the **technology of extrusion** is more and more dedicated to the production of many products like instant noodles, bakery products, snacks and pet food.

Technologists apply complex and nutritional formulations including proteins, carbohydrates, fats, minerals and vitamins. The mix for any extrusion is a pulverulent matrix with flour and starches blended with colourings, spices and flavours. The type of starch will confer on the finished product its main functional properties: texture, volume, structure, capacities of rehydration...

For instance, several patents have already been filed and are available online, describing the use of Gum Acacia to manufacture various types of instant noodles: dry noodles, fried noodles, chicken noodles, etc...

## ADVANTAGES OF GUM ACACIA IN EXTRUSION

- -To improve both process and finished products, hydrocolloids like gum acacia are used as **processing** aids for their thermoplastic and lubricating properties.
- Their incorporation at low level significantly impact the **homogeneity and the machinability** of the mix as well as the **texture** of the extruded products (better expansion).
- The use of gum acacia in extrusion is based on its capacities of food processing improver. Its incorporation into the mix which will be extruded has a direct positive and significant impact on the process of extrusion itself. Moreover, gum acacia impacts desirable rheological properties to the product by **stabilizing**, **thickening and emulsifying**.
- Furthermore, thanks to its status of **natural and vegetable fiber** (DTF content > 90%), the incorporation of gum acacia also allows specific nutritional claim based on fiber enrichment.

## ALLAND & ROBERT SERVICES

- A strong expertise on acacia gum thanks to a dedicated R&D team, research programs and exclusive partnerships with globally recognized universities.
- Production and laboratory that reach the highest quality standards through international certifications.
- A commitment to develop the quality of products through sustainable development, social investment and environmental awareness.
- Solid partnerships with an extensive network of African suppliers to ensure security of supply.

