Konjac gum Introduce & Application

Konjac plant in mountainous areas and hilly lands of above 800-meter altitudes, where annual average ambient temperature about 16°C.

It is mainly distribute China and Japan, and also have long history for cultivating and eating konjac, such as southwest of China, already cultivate konjac for thousands years.
Konjac gum, extract from konjac root.

Main component is glucomannan.

Natural konjac root, contains as follows: 50~60% Glucomanna, 20~30% starch, 2~5% fiber, 5~10% crude protein, 3~5%, soluble sugars, 3~5% ash.
Product Standard

E.U.

E. U. issued the official announcement (S/N L295127, E-425) on November 4, 1998, approving/registering its usage in foods at the maximum dosage of 10g/kg. [Appendix I]

U.S.A

U.S.A., Food and Drug Administration (FDA) approved konjac flour as food additive in 1997, which was published in US Food Additive Regulations 4th Edition. Related standards are also included in US Food Chemical Codex (FCC), approving konjac flour as food jelling agent, thickener, film former, emulsifier and stabilizer CAS:(37220-17-0),1996.

P.R. China


Application

Meat industry:

Suggest dosage of blend gum: 0.5% ~ 1.5%
Blend gum proportion : Konjac gum: Kappa RC: KCL=3:3:4

Final Food:

Sausages/ Frankfurters / Meatballs /corned beef/processed poultry/ processed turkey/ processed chicken

Efficacy:

-Improves the quality of final product texture: sliceability, taste;
-Improves syneresis
-Increases final product yield
-Stabilizes the fat-protein emulsion in meat,
**Dessert Jelly**
Suggest dosage of blend gum: 0.5% ~ 1.0%
Blend gum proportion: Konjac gum: Kappa RC: KCL=3:3:4
Efficacy:
- Increase syneresis
- Jelly more soft, more elastic
- Gel more stable in high temperature
- React with Kappa RC, gel effort increase much, decrease dosage of gum

**Application for Milk Products**
- A few Konjac Gum complexes with guar gum could be used as stabilizer. No condensation and precipitation, but uniformly dispersed.

**Application for Dim Sum**
- Not only just prove the good biting strength, but also keeps good stability in low temperature cold store, or high temperature cooking without damaged. Meanwhile it retains freshness, extends shelf-life and improves production rate.

**Application for Ice-Cream**
- High viscosity, thickness and gel strength by combining with carrageenan or xanthan gum. Preventing ice crystal formation, improving production rate with smooth taste feeling.

**Application for Health Foods**
- The dietary fiber from Konjac gum is capable to absorb fat and feels expansion at same time, makes people feel like bellyful. However, the calories of Konjac gum is extremely low, so there is unlimited for daily consumption of food, balanced diet, reduces weight without harmful to human body.