

# Frequently Asked Questions

## Q: What is gelatin?

A : Gelatin is an easily digestible protein processed from collagen - a protein found in skin, tendon, bone, membrane and connective tissue. Collagen is extracted from the bones and hides of select cows, horses, pigs and in some types of fish. There are no plant sources of collagen.

## Q : What are the differences between non-kosher and kosher gelatin?

A : Non-kosher gelatin can come from cows, fish, horse and pigs. Only kosher cattle hides/skins are used in the manufacturing of Geliko kosher gelatins. There are no physical or functional differences between non-kosher and kosher gelatin.

## Q : Isn't Gelatin made from horse hooves?

A : No. Horse hooves are made of keratin, the same material as your hair and fingernails. Gelatin cannot be made from keratin.

## Q : How is gelatin used?

A : Gelatin has traditionally been used in three major areas: food, pharmaceutical, and photographic industries.

Gelatin use in the food industry is probably best recognized in gelatin desserts and confectionery applications such as marshmallows and gummi candies. It is also used as a binding and/or glazing agent in meats and aspics. In the pharmaceutical health industry, gelatin is used to make the shells of hard and soft capsules for medicines, dietary/health supplements, syrups, etc. It is highly digestible and serves as a natural protective coating for medications.

The unique chemical and physical properties of gelatin make it an important component in the photographic industry. Gelatin serves many useful purposes in the preparation of silver halide emulsions in the production of photographic film.

A new, major application for gelatin is in the paintball industry. The classic-style "war games" are played out using projectiles constructed of gelatin.

#### Q : What are the additional uses of gelatin in the edible market?

A : Surprisingly, gelatin is used in a variety of consumer products. Without identifying the application rationale, a short list of products in which gelatin is present include:

Dairy - ice cream, sour cream, yogurt, cottage cheese, cream pies Meat - ham, aspics, meat loaves, pates Desserts - jellied desserts, puddings, frostings Confectionery - gum drops, lozenges, wafers, marshmallows, fruit snacks, gummi snacks Other - consommé soups, sauces

#### Q : Is gelatin a complete protein?

A : No. While gelatin is a rich source of easily digestible proteins, it is missing the essential amino acid tryptophan.

#### Q : Can kosher gelatin be used in dairy products?

A : Yes. Geliko kosher gelatin is considered pareve according to Kosher Food Laws; foods that are neither milk nor meat.

#### Q: What does gelatin look like?

A : Gelatin is typically produced in a powdered or granulated form. Its color is slightly yellow to light and it's tasteless and odorless. Gelatin may also be sold as a sheet for specialty applications.

#### Q : Is the color of gelatin constant?

A : Gelatin gels will vary slightly in color. As Bloom strength increases, so does clarity. For this reason, high-Bloom gelatins should be used when absolute clarity is required.

## Q : Is all granulated gelatin the same?

A : No. Gelatins are distinguished by their gel strength, expressed as "Bloom." Higher Bloom strength gelatins yield stronger gels with greater clarity.

## Q: What is the Bloom Test?

A : Named after its inventor, the Bloom Test involves a device that measures the rigidity of a gelatin film. A sample of gelatin is prepared with standard proportions of water and gelatin. The sample is processed according to an exacting test protocol, and compressed using plunger moving a specified depth into the test gel. The force required to reach a predetermined depth is expressed as "Bloom strength" or simply "Bloom." Higher Bloom indicates stronger gel and increased clarity.

## Q : What other physical tests are conducted on gelatin ingredients to ensure functionality and quality?

A : Quality control testing includes pH, moisture, viscosity, ash content, and heavy metals. Microbiological testing includes Total Plate Count, Salmonella, Escherichia Coli, and Total Coliforms.

## Q : What is the shelf life of gelatin?

A : If kept in its original container at the specified parameters, gelatin can last almost indefinitely.

## Q: What is gelatin hydrolysate?

A : Sourced from the same raw materials as gelatin, it has the same regulatory status and nutritional value as gelatin, but delivers different functional benefits.

#### Q : How does gelatin hydrolysate differ in application and functionality from gelatin?

A : Most gelatin hydrolysates dissolve in room temperature or cooler water. Gelatin hydrolysate solutions never gel, they only thicken.

#### Q : What are the differences between non-kosher and kosher gelatin hydrolysate?

A : There are no physical or functional differences between non-kosher and kosher gelatin hydrolysate.

#### Q : What is the source of Geliko gelatin hydrolysate?

A : Only kosher cattle hides are used in the manufacture of Geliko gelatin hydrolysate.

## Q : What does gelatin hydrolysate look like?

A : Gelatin hydrolysates are light-colored, dried powders. They are also available in agglomerated form.

#### Q : Is all gelatin hydrolysate the same?

A : No. Gelatin hydrolysates can vary by molecular weight and functionality.