



**CONFIXX®**

*For Next Generation Gummies*

- Fortify gummies with gentle treatment of ingredients
- Process collagen peptides, vitamins, minerals, active ingredients, etc., easily
- Realize desired typical gelatin texture profiles
- Meet legal and pharmacopeial requirements

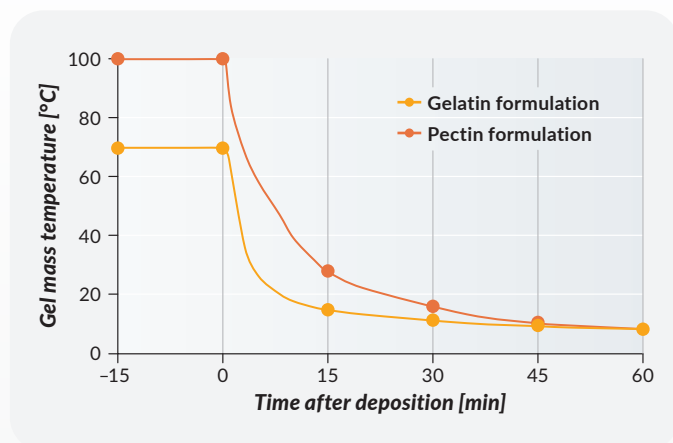
**GELITA**

# Elevate your Production Process

## CONFIXX® Gelatin is Superior to Pectin in a Starch-Free Production Process

Gelatin typically melts just below body temperature and therefore creates gummies that, in terms of taste, texture and mouthfeel, are preferred over those made with pectin. Moreover, most pectins need a highly acidic setting to gel effectively. This acidic environment can adversely affect some active ingredients or cause undesirable interactions. CONFIXX® with its lower depositing and processing temperatures, helps prevent degradation or sugar hydrolysis during production, providing a clear advantage in the manufacturing process. It ensures that the final product meets the desired standards for texture and taste, overcoming the limitations often encountered with pectin in gummy production. With its accelerated setting behavior CONFIXX® eliminates the former challenges associated with gelatin for the starch-free process.

**Figure 1: Comparative Gel Mass Temperature: Gelatin vs. Pectin Gummies**



Traditionally, gelatin gummies have been formed and dried using starch-based molds, with the starch being reused throughout the production process. However, as the market for fortified gummies experiences significant growth, this traditional method is no longer suitable for these types of products. Consequently, a starchless production process utilizing molds made from plastic, silicone, metal, or carbonate has been established. This method guarantees a safe, hygienic, and rapid production of various gummy types. To accommodate this process, CONFIXX® gelatin has been developed to meet the necessary parameters for starchless gummy production, which is fast setting under low free available water conditions after cooking.

### CLEAN PRODUCTION

- Starch-free manufacturing process
- GMP-compliant production of functional and medicinal gummies
- Clean separation of batches with different active ingredients

### INCREASED SPEED AND FLEXIBILITY

- Production time reduced from two days to a few hours
- No drying of gummies necessary
- Smaller batches possible, high flexibility for product changes

### REDUCTION OF PRODUCTION COSTS

- Elimination of starch preparation
- Reduction of production space and elimination of drying halls
- Savings in energy and workforce

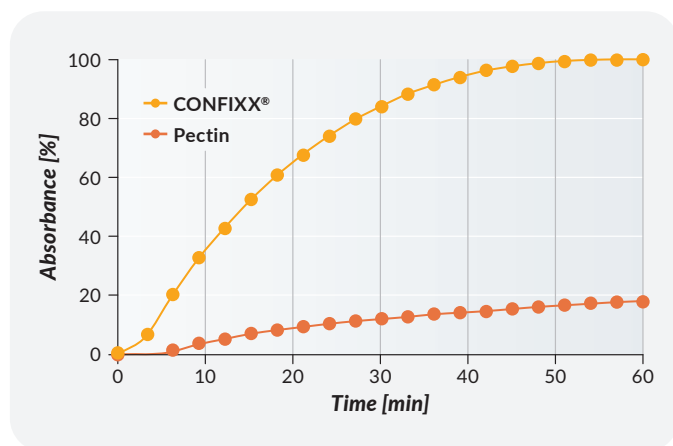
### EXCELLENT PRODUCT QUALITY

- Preservation of the unique chewable, gelatin-typical texture
- High dosing accuracy of active ingredients in the final product
- Individually controllable release profile for active ingredients

# Highly Effective Throughout Entire Shelf Life

## CONFIXX® – Enhance Your Gummy Production With our Premium Gelatin for Optimal Release

Figure 2: CONFIXX® Bovine & Pectin in SGA – Release; Closed Storage at 30/65; Whole Gummies



## Discover the Impact of CONFIXX® as Revealed in Storage and Release Tests Conducted at a pH Value of 1.2 to Simulate Stomach Conditions

While it's common to expect a decrease in performance as products age, gummies made with CONFIXX® maintain their effectiveness, ensuring that consumers consistently receive the full benefits of the supplements throughout the product's shelf life. Pectin-based gummies, though stable, tend to have a slower release rate right from the start. This difference in initial performance emphasizes the benefits of choosing gelatin for a more dependable and efficient delivery of active ingredients in gummies.

Moreover, pectin often fails to meet the pharmacopeial requirement of releasing 75 - 80 % of contents within 45 minutes, while gelatin meets all legal and regulatory standards for supplement production.

**Optimized for Various Conditions:** Tests also consider the interaction between gummies and dietary calcium. Unlike pectin, CONFIXX® maintains its effectiveness even in the presence of calcium, such as from drinking naturally calcium-rich water, avoiding the issue of irreversible precipitation and ensuring continued nutrient release.

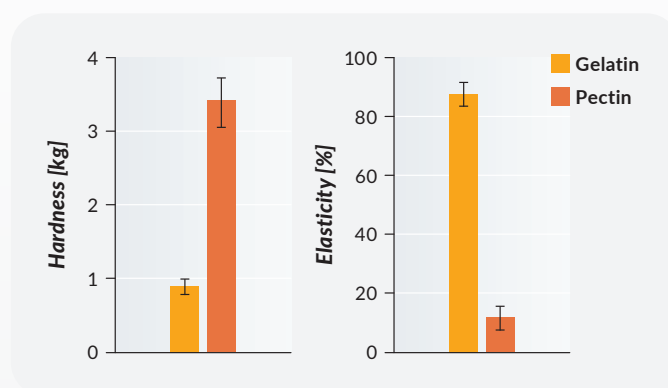
## Gelatin Remains Gold Standard



### Gelatin-Based Gummies: Superior Texture and Elasticity

Gelatin-based gummies deliver superior texture, elasticity, and sensory appeal for an unmatched taste experience. Studies and consumer evaluations highlight the distinct advantages of gelatin gummies over alternative ingredients. The firmness can affect consumer preference, as many enjoy a softer, more palatable texture. The elasticity of the gummy is crucial for providing the long-lasting chewy mouthfeel that consumers expect.

Figure 3: Hardness & Elasticity: Gelatin vs. Pectin Gummies



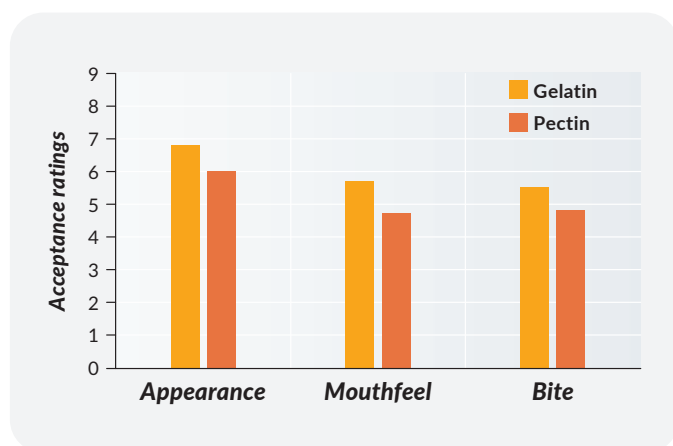
**Hardness:** Pectin gummies are significantly harder than gelatin gummies in the formulations tested.

**Elasticity:** Gelatin gummies exhibit far greater elasticity compared to pectin gummies.

## Favored for its Consumer Appeal

In an independent study performed by the “FoodSense” Competence Center at Osnabrück University of Applied Science in Germany, gelatin gummies consistently outperform pectin gummies in sensory evaluations, particularly in categories such as mouthfeel and chewiness. Also, the visual appeal of gelatin gummies is rated higher, likely due to their more transparent appearance. These results suggest that consumers find the sensory properties of gelatin more pleasing than their pectin counterparts.

**Figure 4: Acceptance Ratings of Gelatin and Pectin-Based Citrus Gummies. Conducted by the “FoodSense” Competence Center at Osnabrück University of Applied Sciences.**  
(n = 76; Scale: 1 = exceptionally bad; 9 = exceptionally good)



## Exciting Application Possibilities for Gelatin-Based Gummies

**Timeless Favorites:** These are the standard gelatin-based gummies commonly found in the confectionery sector, often referred to as sweets or “fun-gummies”.

**Consistent Market Expansion:** Fortified gummies are gaining traction, incorporating a range of active ingredients. These include high-dosage supplements enriched with vitamins or oils, as well as daily-dose products containing bioactive compounds or hormones, catering to health-conscious consumers.



Want to know more about CONFIXX®? **SCAN HERE!**

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GELITA AG · Uferstr. 7 · 69412 Eberbach · Germany  
[www.gelita.com](http://www.gelita.com)



**Emerging Possibilities:** The market for dietary supplement gummies is expanding, especially those containing non-prescription or “light” active pharmaceutical ingredients. These over-the-counter products are becoming increasingly popular.

**Long-Term Vision:** There is a growing interest in medicated gummies that contain prescription active pharmaceutical ingredients, known as RX products. These gummies are positioned at the intersection of medicine and convenience, offering a novel delivery method for medications.

These diverse applications highlight the potential of gelatin-based gummies to adapt and thrive in both the confectionery and pharmaceutical industries.

## Your Partner in Gummy Production

Our commitment to innovation and quality makes our gelatin the ideal choice for gummy manufacturers aiming to enhance their product offerings.

Utilize our expert know how to enhance your gummy supplements, ensuring they provide the utmost health benefits to consumers. Collaborate with us to produce gummies that are not only delicious but also demonstrated to function excellently under a variety of consumer conditions.

# GELITA