



Manufacturing process

The manufacturing process of edible gold leaf (like that used in Goldwasser and similar gold nano drinks) involves several precise and skilled steps:

1. **Melting and Alloying:** Pure gold (22-24 karats) is melted at over 1000°C, often alloyed with small amounts of silver or copper to enhance strength, as pure gold is very soft. The molten metal is poured into molds and cooled to form ingots.
2. **Rolling:** The gold ingots are passed through rolling mills multiple times to gradually reduce their thickness from bars to very thin strips measured in microns.
3. **Cutting and Preparing for Beating:** The thin gold strips are cut into small squares and inserted between special paper—historically called goldbeater's skin or similar—to prepare for beating.
4. **Beating (Hammering):** Using mechanical hammers and skilled manual finishing, the gold squares are hammered repeatedly. This beating process spreads and thins the gold into extremely thin sheets, typically around 0.1 micrometers thick. The finish is so delicate and smooth that the gold leaf becomes almost translucent and weightless.
5. **Final Cutting and Packaging:** The gold leaf sheets are carefully cut into smaller squares (about 3 × 3 inches or 80 mm x 80 mm) suitable to be turned into edible flakes. These sheets are packaged in protective booklets designed to prevent damage.

This whole process requires expert craftsmanship, especially during the beating and finishing phases, to ensure thinness, uniformity, and the luxurious appearance essential for edible gold leaf used in beverages or food.

The ultra-thin sheets are then fragmented into flakes that can be safely suspended in drinks like Goldwasser, providing the characteristic shimmering visual effect without altering taste or safety.

This manufacturing follows ancient traditional methods with modern technological support, maintaining the balance between artistry and precision.

Sources documenting this process include expert gold leaf producers and historical craft descriptions. ^[1] ^[2] ^[3] ^[4]



1. <https://www.manetti.com/en/gold-leaf-production/>
2. <https://cornucaupia.com/deiaurum/how-edible-gold-leaf-is-made/>
3. <https://barnabasgold.com/how-is-gold-leaf-made/>

4. https://enkanazawa.hakuichi.co.jp/about/kinpaku_flow.php