

## do you know gold wasser or gold chlege used in gold nano drink in order to show people effect of this drink.

Give me explanation of this with image

Goldwasser and drinks with suspended gold—often called "gold nano drinks"—contain **gold nanoparticles (AuNPs)**, which are chemically stable and biologically inert when highly pure, making them safe for incidental ingestion in small amounts as decoration or for visual effect. Edible gold has been used traditionally for luxury alcohols like Goldwasser and is now added to some modern drinks to create an impressive effect, exploiting the way gold flakes scatter light.

## **Purpose and Effect:**

- **Visual Impact:** Gold nanoparticles or flakes are used mainly for their visual appeal; they do not dissolve but remain suspended, creating a sparkling effect that showcases luxury and uniqueness in the drink.
- Claims of Benefit: Some "gold nano" supplement drinks claim health effects such as antiinflammatory benefits or mood enhancement, but scientific evidence for such effects is minimal or inconclusive. [2] [3] [4]
- **Safety:** Edible gold passes through the digestive system without being absorbed, so it is largely eliminated as waste. There is very limited toxicity at low concentrations typical in food and drink. [5] [2] [1]

## Risks and Concern:

• Gold nanoparticles at very high or sustained concentrations might cause cell stress or changes in laboratory studies, but this is far above what is found in food products. Chronic effects from dietary exposure to nanoparticles are still an area of active research and safety reviews. [6] [2] [5]

The terms "Goldwasser" and "gold chlege" likely refer to **drinks containing edible gold particles** (Goldwasser is a famous herbal liqueur with suspended gold leaf). There is no evidence that gold visibly or physiologically "shows people the effect" of a drink other than making the drink look spectacular.

Summary: Gold in drinks is mainly for show, with negligible physiological effect at edible concentrations; purported health benefits from gold nanoparticles remain unproven and are mostly marketing claims, though ingestion in these amounts is considered safe by food authorities.

- 1. https://www.foodandwine.com/news/is-gold-safe-to-eat
- 2. https://link.springer.com/article/10.1007/s42452-019-0354-2
- 3. <a href="https://pmc.ncbi.nlm.nih.gov/articles/PMC9311980/">https://pmc.ncbi.nlm.nih.gov/articles/PMC9311980/</a>
- 4. <a href="https://www.nature.com/articles/s41598-019-46671-1">https://www.nature.com/articles/s41598-019-46671-1</a>
- 5. https://particleandfibretoxicology.biomedcentral.com/articles/10.1186/s12989-023-00539-5
- 6. <a href="https://portlandpress.com/bioscirep/article/40/3/BSR20194296/222271/The-effect-of-different-concent-rations-of-gold">https://portlandpress.com/bioscirep/article/40/3/BSR20194296/222271/The-effect-of-different-concent-rations-of-gold</a>