



EOG
Electrolytic Ozone

Multi-functional Ozone Mug

EOG-M2000



Our Advantages



Application Fields of
EOG Technology



Analysis of EOG Technology
Advantages

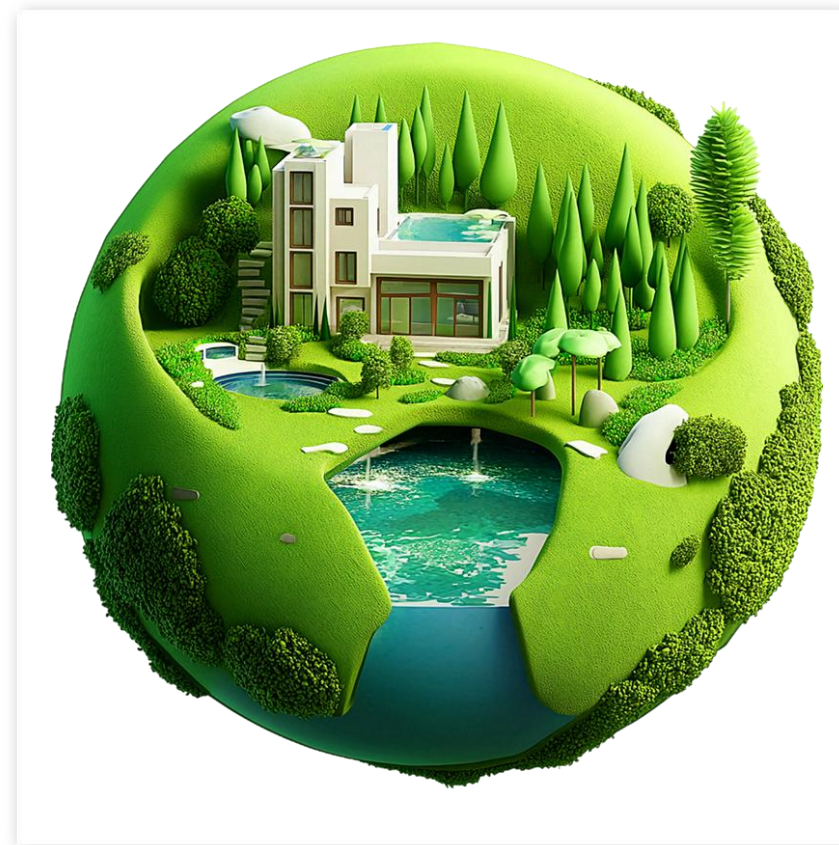


Introduction and Application
of Ozone Mug

***Bad breath and bacteria will no longer linger!!**

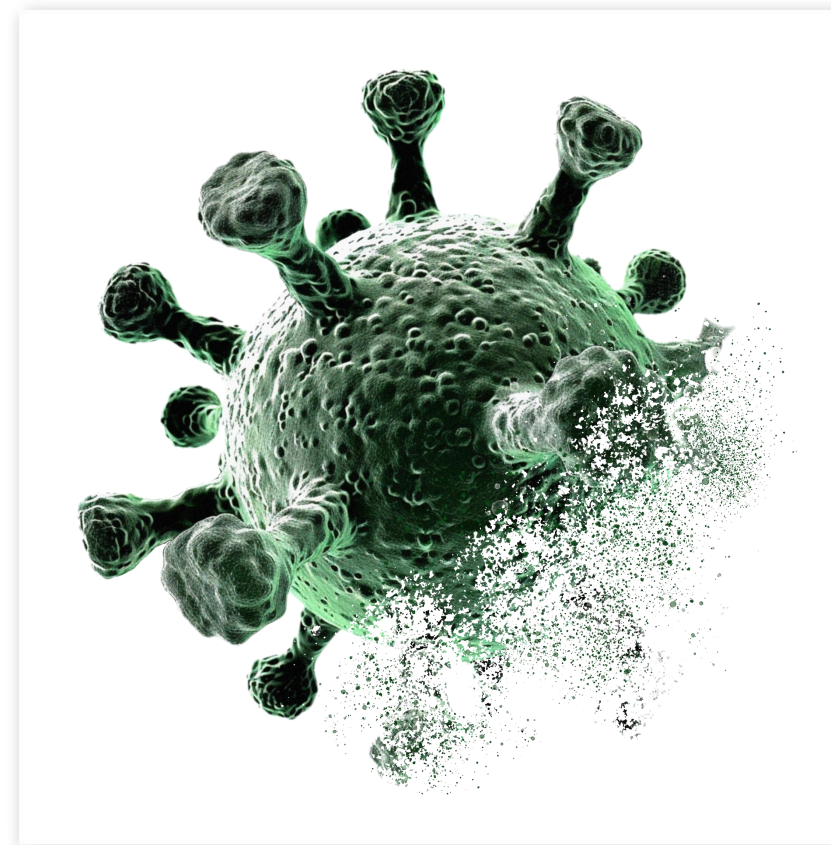
1、 Our Advantages

Electrolytic Ozone Generation (EOG) technology compare with other competitors with following key benefits:



Safty enviromental protection & Non-Toxic

Produces zero harmful byproducts
(ozone naturally decomposes to oxygen)



High-Efficiency & Rapid Action

Generates high-concentration ozone
water on demand, exceeding industry
standards



Cost-Effective

Delivers superior economic value with
lower operational costs

* Therefore, this technology is more suitable for being applied to sterilization and cleaning products with various uses, ranging from small personal health and hygiene products, small and medium-sized home appliances to large-scale commercial disinfection and cleaning solutions.

2、 Application Fields of Electrolytic Ozone Water (EOG) Technology



•Water Treatment:

Drinking water disinfection: Replaces chlorine with no chemical residues.

Wastewater treatment: Degrades organic matter, removes color and odor.

•Medical and Health:

Wound disinfection: Used for burns, ulcers, and infection prevention.

Dental applications: Root canal treatment or oral sterilization.

•Food Industry:

Fruit and vegetable cleaning: Removes pesticide residues and microorganisms.

Food preservation: Extends shelf life.

•Agriculture:

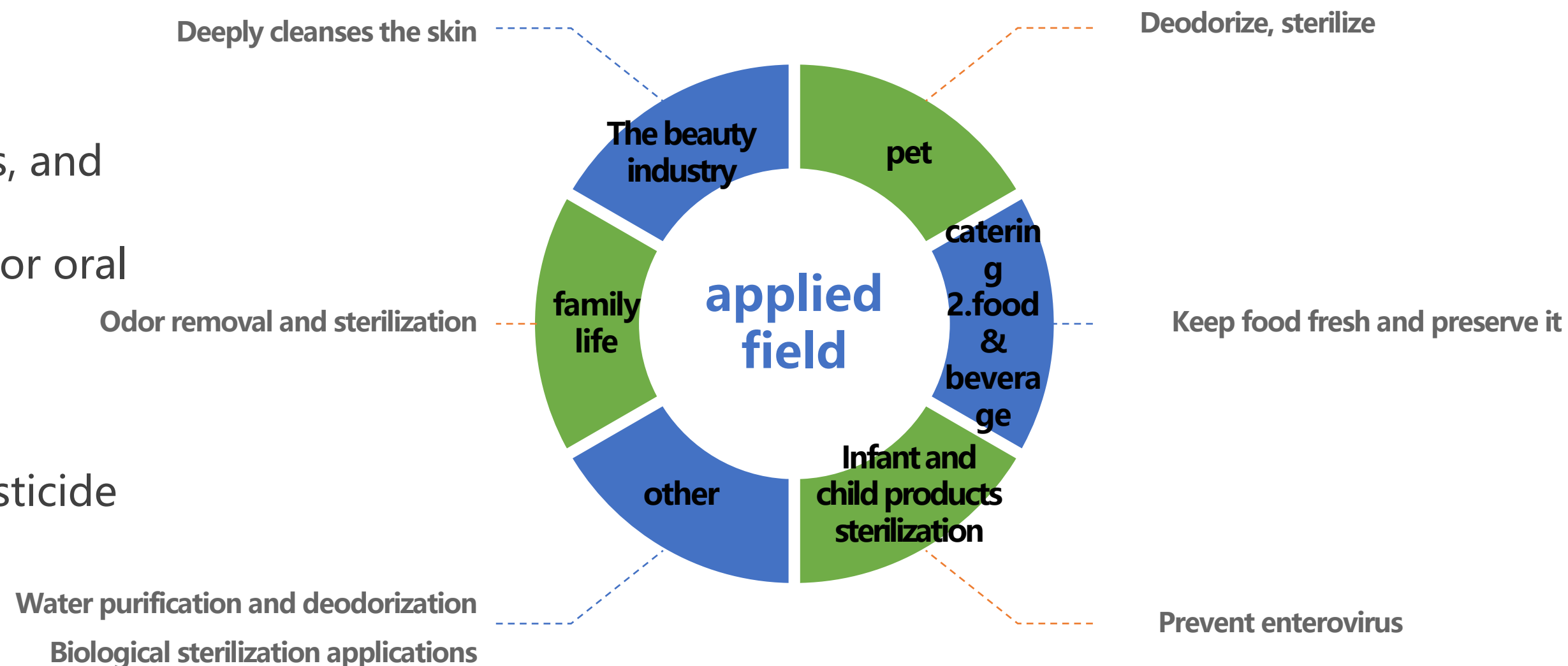
Irrigation water sterilization: Prevents plant diseases.

Aquaculture: Purifies water, reduces antibiotic use.

•Daily Life:

Air purification: Eliminates formaldehyde and odors.

Household cleaning: Disinfects tableware and clothing.



3. Analysis of EOG Technology Advantages

3.1 Comparative Analysis: Electrolytic Ozone Generation (EOG) vs. Corona Discharge (CD) Technologies

Electrolytic Ozone Generation (EOG) Technology is optimized for household and daily-life applications. By electrolyzing readily available tap water, it generates high-purity ozonated water (O_3) for disinfection, sterilization, and deodorization. Below is a technical comparison with Corona Discharge (CD), the mainstream air-based ozone generation method.

Parameter	EOG (Electrolytic Ozone Water)	CD (Corona Discharge)
Feedstock	Tap water	Ambient air
Dissolution Method	O_3 pre-dissolved in water before output ✓	O_3 gas mixed into water post-generation
O_3 Concentration	0.5–3.5 ppm (ideal for sterilization)	0.03–0.3 ppm (low efficacy)
O_3 Dissolution in water Rate	60–70% (high efficiency) ✓	<5% (high aeration loss)
Coproducts	Oxygen (O_2) – Non-toxic ✓	NO_x (Nitrogen oxides) – Carcinogenic
Market Share	2–5% (niche high-end applications) ✓	95–98% (legacy systems) ✓
Advantages	High O_3 concentration for superior sterilization, pesticide removal, and odor elimination	Low production cost • Simple setup
Disadvantages	High technical barriers, relatively high cost	Low O_3 concentration, poor efficiency



3.2、 Sterilization Methods Efficiency Comparison

The following table compares the effectiveness of various sterilization methods available on the market:

Effectiveness/Method	EOG Ozonated Water	Chlorine Dioxide	Hydrogen Peroxide	Acidic Water	Liquid Chlorine	UV Light	High-Temp Steam
Sterilization Power	Extremely Strong 	Strong	Strong	Weak	Moderate	Moderate	Moderate
Sterilization Time	30 seconds 	3-5 minutes	5-10 minutes	5-15 minutes	20-30 minutes	5-10 minutes	15-30 minutes
Deodorization	Yes 	Yes 	Yes 	No	No	No	Yes 
Food Preservation	Yes 	Yes 	No	No	No	No	No
Chemical Residue	None 	Present	Present	Contains sodium, heavy metals and toxic substances	Present	Present	None
Secondary Pollution	None 	None 	Present	None 	Fluoride residue	None 	Present
Effectiveness/Method	EOG Ozonated Water	Chlorine Dioxide	Hydrogen Peroxide	Acidic Water	Liquid Chlorine	UV Light	High-Temp Steam

4、 Introduction and Application of Ozone Multi-functional Water Mug

4.1 Multi-functional Ozone Mug

Product Features






Utilizing the Electrolytic Ozone Generation technology, potent ozone water can be generated within 2 minutes. It precisely inhibits 99.99% of oral bacteria, prevents tooth decay and bad breath from the root cause, and simultaneously accelerates the healing of oral ulcers and deeply cleans the gaps in dentures or braces. One device can fulfill both oral care and household health protection. With an intelligent design and one-button operation, it is safe, environmentally friendly and can save the costs of consumables (mouthwash, effervescent tablets).



4.2 Specifications of Multi-functional Ozone Mug

Product Specifications:



Item	Detailed Specifications
Model Number	EOG-M2000
Max Voltage	27V DC
Max Power	5.4W
Cup Capacity	350mL (12 oz)
Dimensions	71×71×172mm (2.8×2.8×6.8 in)
Net Weight	250g (0.55 lbs)
Battery Capacity	1800mAh Li-ion (3.7V)
Usage per Charge	30-60 cycles*
Waterproof Rating	IPX7 (1m/30min immersion)
Ozone Concentration	0.5-2.0 ppm
Water TDS Range	50-800 ppm
Water Temperature	4-35°C (39-95°F)
Water Source	Municipal Tap Water
Warranty	1-Year Limited Warranty
Color Options	Pearl White / Sakura Pink / Taro Purple / Avocado Green
Certifications	    

4.3 Product Details Display

pandect



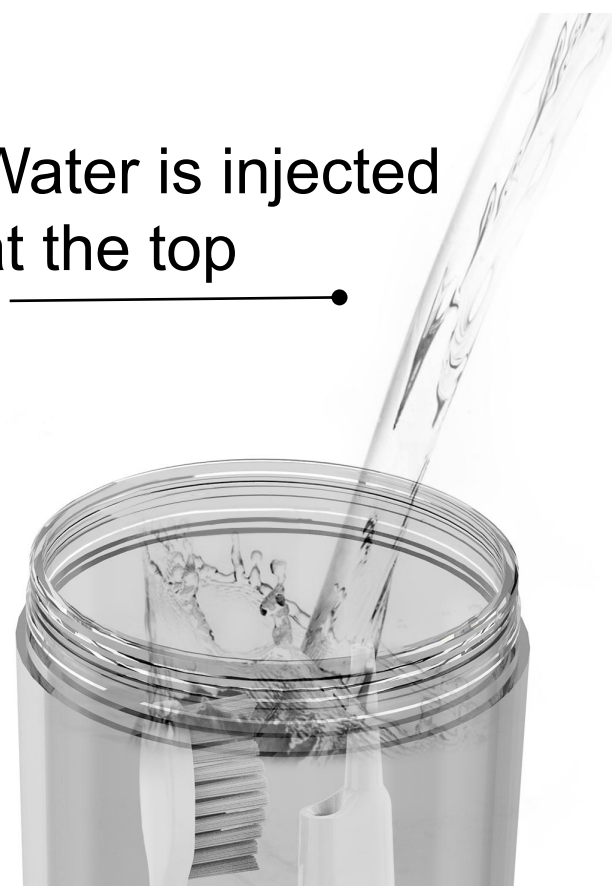
mirror

Cleaning tools storage



Rotate to open the lid

Water is injected at the top



High purity titanium metal ozone generation chip



4.4 Application Scenarios



Post-Meal/Bedtime Mouth Rinse for Halitosis



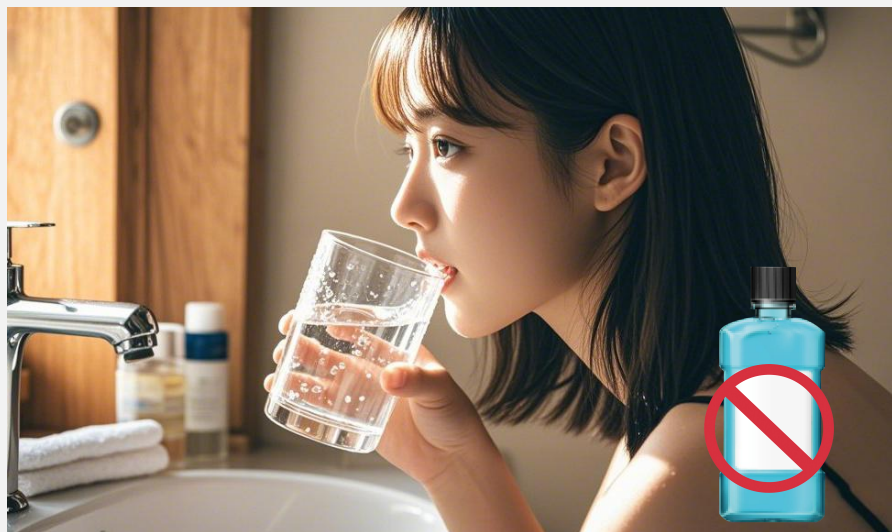
Denture/Retainer Cleaning



Oral Ulcer Relief



Cavity Prevention & Oral Antibacterial



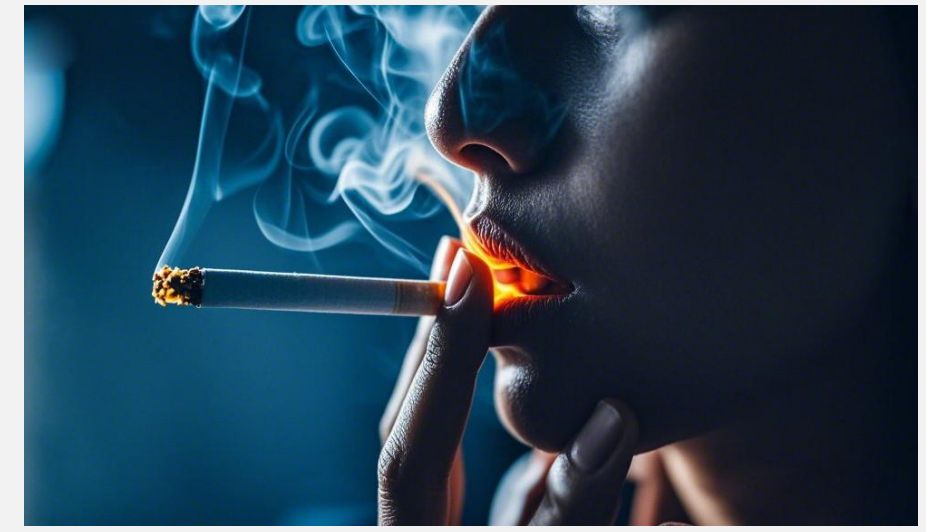
Alcohol-Free Mouthwash Alternative



Effervescent Tablet Replacement



Cold/Flu Prevention Aid



Tobacco Odor Elimination

4.5 Application of Multi-functional Ozone Mug in oral cleaning

Ozone water is a kind of water containing a certain concentration of ozone, with strong oxidation and bactericidal power, can effectively eliminate a variety of bacteria and viruses,

Examples include E. coli, staphylococcus aureus, salmonella, fungi and molds. Instead of mouthwash, use it every day to effectively protect oral health.

The ideal way is three times a day, or at least once before bed.

- Bactericidal and deodorizing**
Ozone water can quickly kill 99.99% of the bacteria in the mouth, helping to prevent tooth decay
Bad breath and other oral problems.
- Prevent colds and flu**
The mouth is an entry point for bacteria and viruses, and keeping it clean can help prevent common colds and flu.
- Improve immunity**
Good oral care helps strengthen the immune system and makes the body more resistant to disease.
- Replace mouthwash**
Rinsing your mouth with ozone water is not only safe, but also reduces the cost of buying expensive mouthwash.



4.6 Effectively prevent and solve oral problems

dental calculus

Dental calculus is calcified plaque and fragments of oral cells. Dental calculus is common. It is produced under the gum and will stimulate the gingival tissue to cause gingivitis. Moreover, after the formation of dental calculus, it is easy to be stained by tobacco, tea and so on, which greatly affects the oral beauty.

Gum problems

The main manifestations of gingival problems are redness and swelling of the gums, bleeding of the gums, etc. Because the oral cavity is not clean, food residues, tartar, dental stones often accumulate around the teeth, and various bacteria in the mouth reproduce in large quantities, leading to bleeding of the gums, patients often accompanied by bad breath.

Cavities (tooth decay)

Bacterial metabolism in the mouth produces acid that can erode hard enamel and develop into dental caries, a disease in which the hard tissue of the tooth is gradually destroyed. Dental caries is a bacterial disease, so it can lead to pulpitis and periapical inflammation, and even cause inflammation of the alveolar bone and jawbone.

The problem of oral odor

Bad breath is mainly caused by oral bacteria that break down food amino acids to produce volatile sulfur-containing gases. Bad breath can be caused by poor oral hygiene, periodontal disease, dry mouth, smoking, illness or eating certain foods.

