

Hands – on Workshops  
Lecture Presentations  
Consulting  
Coaching

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**Periodontal Diagnosis and Treatment Planning**  
**Plus**  
**Beating Up on Periodontal Disease**  
*A Minimally Invasive Approach*

Greater Kansas City Dental Society  
October 7, 2022

- I. Personal Plaque Control (PPC) vs “Home Care”
- II. Why common?
  - a. 33% floss regularly
  
- III. Most ANY treatment works
- IV. Considerations
  - a. Surgery or SRP helpful?
  - b. Prognosis



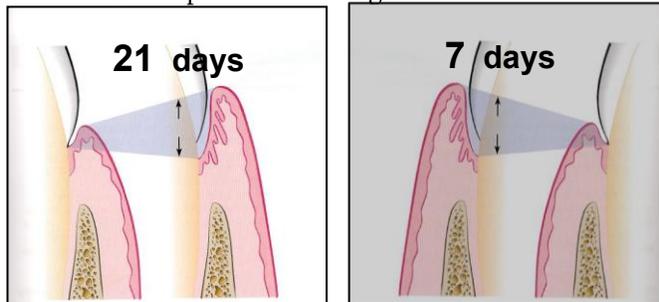
19 years

- c.* Occlusion – it's role in breakdown
- d.* Bone graft considerations
  - i.* 3 wall best
  
- e.* Ways to overcome
  - i.* Communication – Bob Barkley
  - ii.* Simplified PPC
- f.* Rationale AGAINST PPC



Biologic Width Violation

- g.* Rationale FOR PPC
  - i.* Experimental Gingivitis



- ii.* Benefits of dilute bleach



***h.*** Evidence shows maintenance care WORKS

***i.*** Need compliance

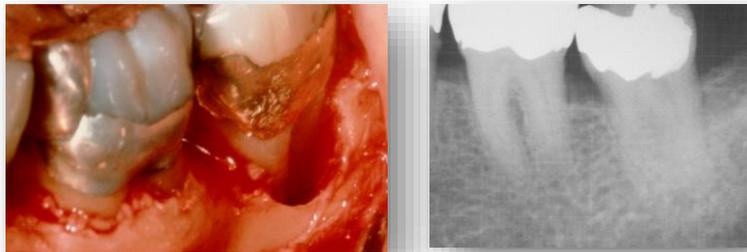
***i.*** Trauma from Occlusion

***i.*** Pole in ground



***ii.*** Germ free monkeys

***iii.*** Diagnosis tricky



No radiographic evidence

***iv.*** Splinting

v. Proper Curve of Spee



Helped by Crown Lengthening

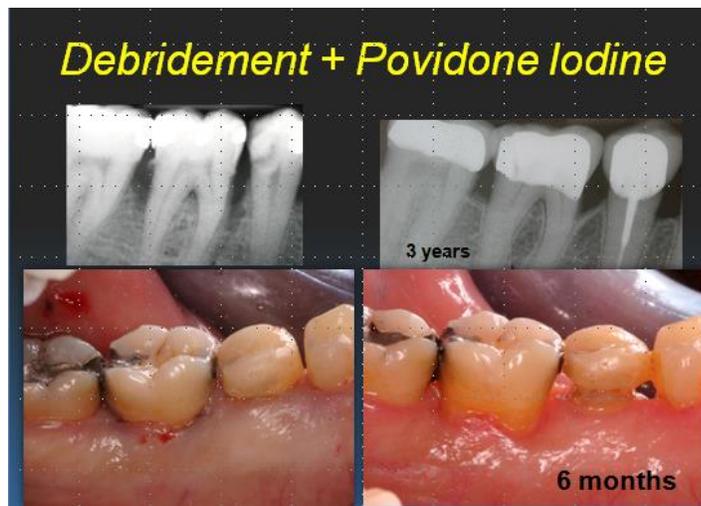
- j.** Save teeth vs. Implants
  - i.** Implants NOT the panacea
  - ii.** Proper endo or crown lengthening can make teeth restorable
  - iii.** McGill Protocol

- V. Core Values
- VI. Maintenance care
- VII. Treatment Goals
  - a.** Stabilize disease
  - b.** Treat disease
  - c.** Maintain disease



- e. Role of disinfectant (Clorox)
- f. Role of Interdental Cleaning (Interdental Brush)
- g. Bleach evidence as far back as World War I and JADA 1931

V. Potential bone growth by killing bacteria



- a. Rinsing with Bleach at home as an alternative?
  - i. Good evidence it works
  - ii. Some limits – still subgingival irrigation more reliable if overcome compliance
  
  - iii. Jorgen Slots DDS – must KILL bugs
    - 1. Reports Mechanical Tx alone not enough
    - 2. Grad student reports on rinsing alone is effective
    - 3. **1 teaspoon of 8.25% Clorox, or 1.5 teaspoon of 6% Clorox to an 8 oz glass of water (fresh each time).**

VI. Maintenance protocol

- a. Simplified PPC with Clorox and Interdental Brushes



- b. To target bacteria
- c. PREMISE – Periodontal Disease is INFECTION  
Correct target – less bacteria means less disease. Period!

VII. Premise

- a. Less bacteria = less disease

VIII. Evidence from literature on limitations of traditional approaches:

- a. Bone Grafting

- b. SCRP

c. Lasers

d. Curette efficiency

e. Antibiotic use

IX. Treatment (see outline below)

a. Different TARGET – Bugs vs. Pockets

i. Culture

ii. Eliminate guesswork

b. Ultrasonic, root plane, and debride thoroughly

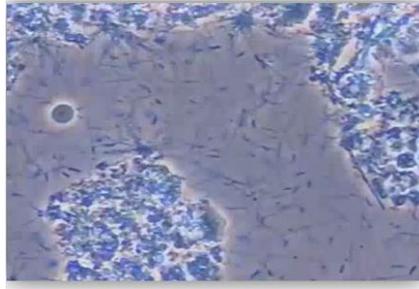
c. If surgical: Sulcular incision and full flaps

i. Use burs as needed to degranulate deep osseous lesions

d. No osseous reductions

e. Betadine full strength for 5 minutes, and rinse with very dilute Clorox –  
few drops in dappen dish

**f. Microscope SO useful**



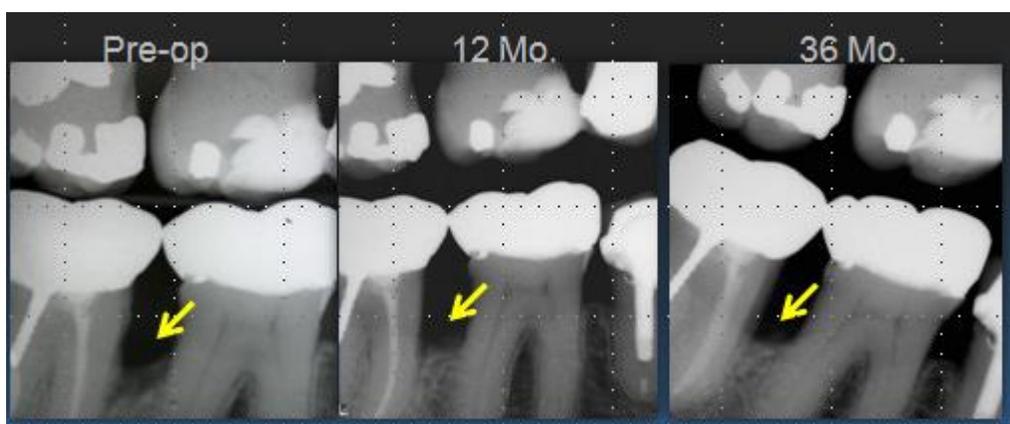
- g. Suture with chromic gut, and rinse with Chlorhexidine for two weeks post-op
- h. Clorox use at home – see handout sheet for dilutions
- i. Culture service MicrobeLink DX – see resource sheet



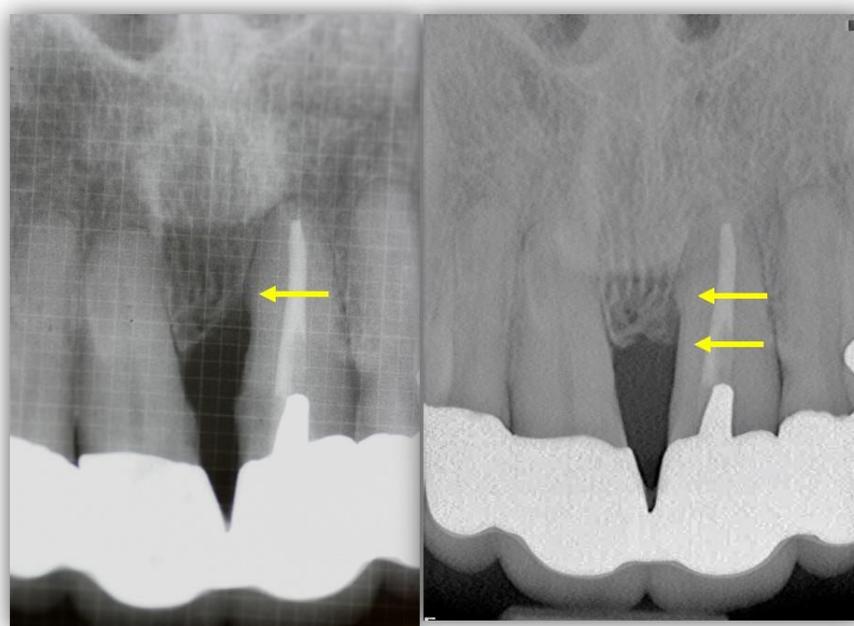
X. Cases to illustrate results – Antibiotic from culture was used

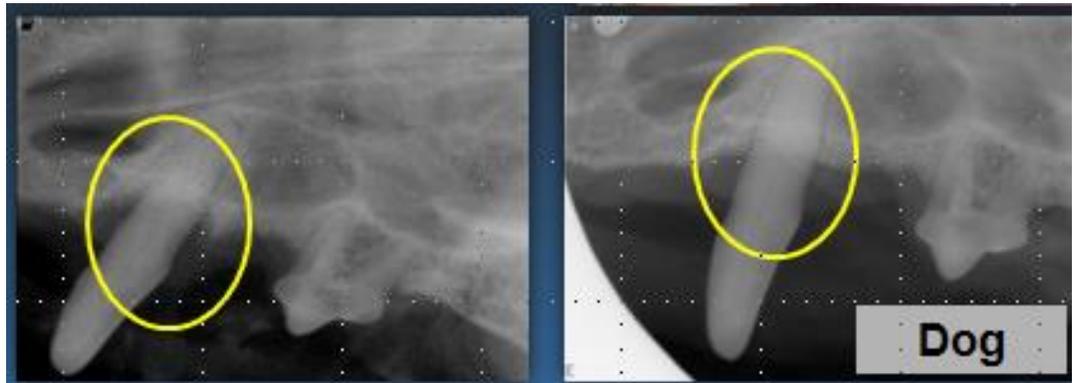


Harry



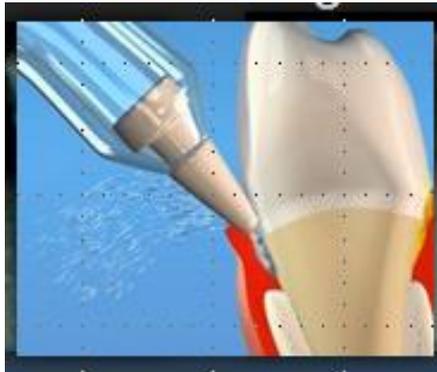
Judith





a. Furcations really can be maintained (pre-op and 19 years)  
(Silver Diamine FL)

Key = compliance by patient



**Bob**



**(19 years)**

XI. Home Maintenance Self Care Protocol

- a. Water irrigation and dilute Clorox twice per week, not more.

(See instruction sheet)

- b. Fluoride topically (0.4% Stannous gel)

- c. Or rinsing with dilute Clorox in lieu of irrigation if compliance low

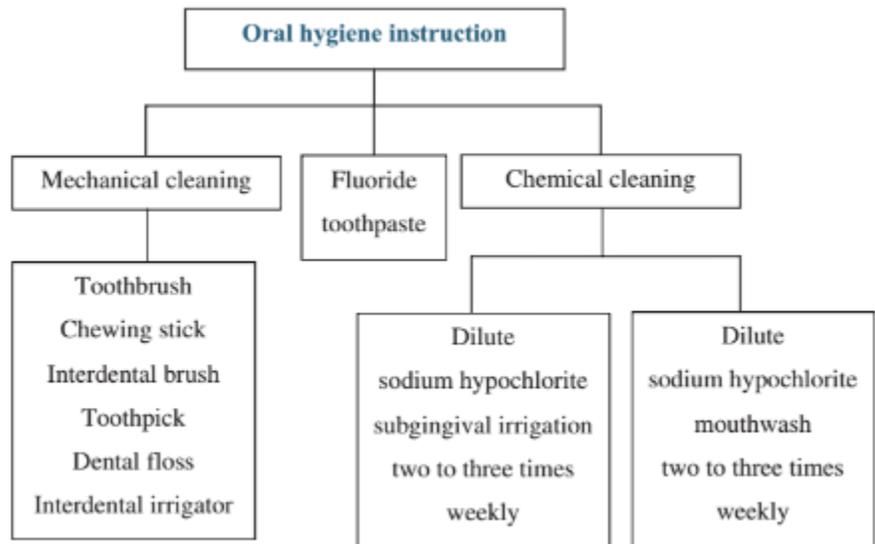
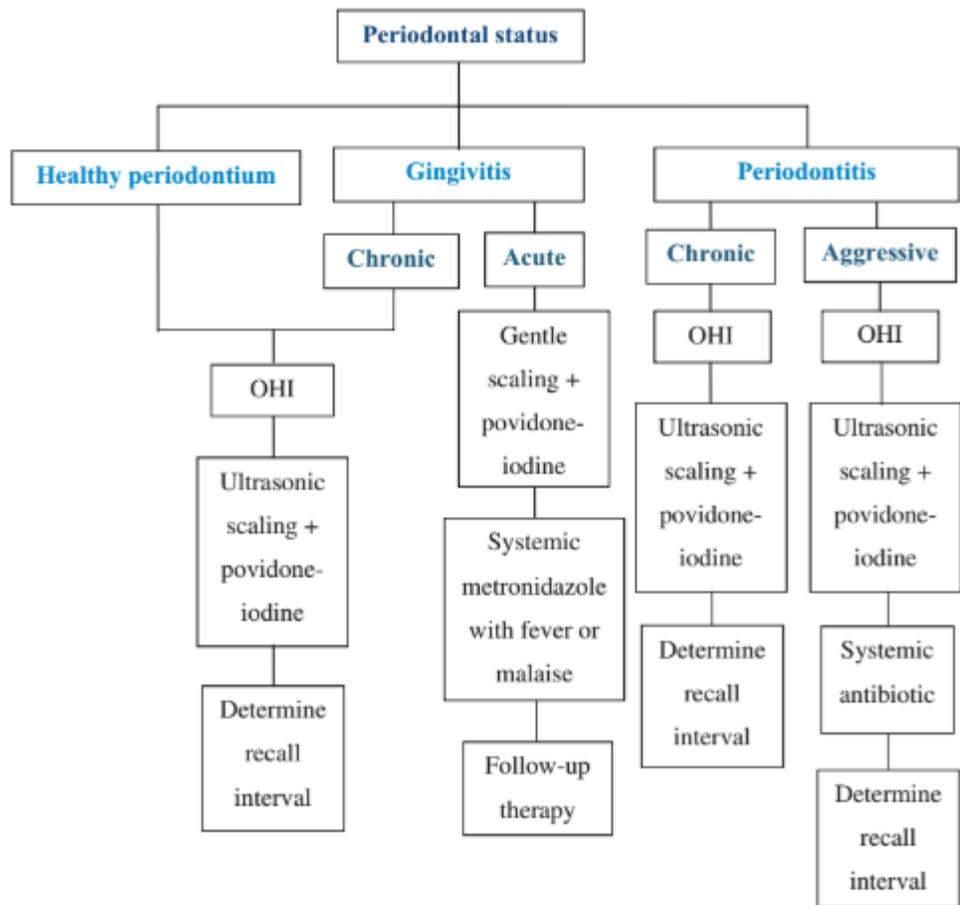
i. Evidence shows benefits

ii. USC Grad Student research

- d. Microscope – ongoing information and motivation

- e. Interdental brush vs Floss – Maybe more simplified? KISS





Outline of antimicrobial treatment per Jorgen Slots DDS;  
Periodontology 2000; 2012

### Proposed Anti-infective Periodontal Therapy for Severe Periodontitis

Table 2 presents an antimicrobial periodontal therapy that specifically aims at herpesviruses (valacyclovir/acyclovir) and periodontopathic bacteria (amoxicillin-metronidazole, ciprofloxacin-metronidazole) and applies common antiseptics (povidone iodine, sodium hypochlorite) plus ultrasonic scaling. Treatment of severe periodontitis starts logically with herpesviruses, as they initiate growth of periodontopathic bacteria.<sup>3</sup> The suggested therapy targets periodontal pathogens in subgingival sites, within gingiva, and in major ecosystems of the mouth and includes overlapping and duplicating treatments, each of which has shown great efficacy against herpesviruses and pathogenic bacteria in previous studies.<sup>1,9</sup>

**Table 2. Flow of affordable, safe, and effective treatment of severe/disease-active periodontitis\***

Time	Treatment	Purpose/Comments
Day 0	10% povidone-iodine subgingival irrigation for 5 minutes	To reduce introduction of viruses and bacteria into the bloodstream during scaling. The povidone-iodine is applied to the base of periodontal pockets of both scaled and non-scaled sites using, e.g., a 3-mL endodontic syringe with a 23-gauge cannula having a blunt end and side ports. A single course of subgingival iodine irrigation of the entire dentition takes about 1.5 minutes and is performed three times for a total application time of 5 minutes.
Day 0	Gross scaling with ultrasonic instrument	To reduce subgingival calculus and biofilm, for diminishing gingival bleeding and facilitating detection of calculus at day 10 (see below).
Day 0	10% povidone-iodine subgingival irrigation for 5 minutes.	To reduce remaining viruses and bacteria post-scaling.
Day 0	Systemic valacyclovir, 500 mg, twice daily for 10 days.	As herpesviruses trigger bacterial growth, antiviral therapy is carried out first. Systemic valacyclovir has the potential to eliminate high loads of herpesviruses in deep periodontal pockets and within inflamed gingiva. Herpesviral chemotherapeutics are effective against viruses in the lytic phase, which basically limits the valacyclovir treatment to disease-active periodontitis. Valacyclovir may be substituted by less expensive acyclovir.
Day 0	0.1% to 0.25% sodium hypochlorite (diluted regular household bleach) oral rinse for 30 seconds twice weekly (patient self-care)	Sodium hypochlorite is highly effective in removing and preventing dental biofilm and gingival inflammation (bleeding). Patient self-care includes sodium hypochlorite freshly prepared for twice-weekly 30-second oral rinses. Sodium hypochlorite is readily available as household bleach, and 0.165% sodium hypochlorite can be obtained by adding one teaspoon (5 mL) of 8.25% Regular Clorox® Bleach to a large glass (250 mL/8.5 oz) of water. Because of sodium hypochlorite's non-discriminative action of killing, it does not induce pathogenic superinfections and may even promote a healthier oral microbiota because of rapid posttreatment repopulation of indigenous/low-virulence bacteria relative to pathogenic species. Overuse or high concentration of sodium hypochlorite may produce brownish/black extrinsic tooth staining in some individuals.

Day 10	10% povidone-iodine subgingival irrigation for 5 minutes	To reduce introduction of infectious agents into the bloodstream during scaling.
Day 10	Definitive scaling and root planing	Scaling and root planing only in sites with verified calculus or suspicion of calculus. Antiseptics and antibiotics are used to remove periodontal pathogens in non-scaled sites.
Day 10	Amoxicillin-metronidazole or ciprofloxacin-metronidazole for targeting major periodontopathic bacteria	Amoxicillin-metronidazole (250 mg of each, three times daily for 8 days) for young and middle-aged patients. Ciprofloxacin-metronidazole (500 mg of each, twice daily for 8 days) for older patients and for patients in developing countries. These patients frequently harbor subgingival enteric rods.
Day 10	Patient self-care: instruction in oral hygiene, including oral rinsing with 0.1% to 0.25% sodium hypochlorite (diluted regular household bleach) for 30 seconds twice weekly	Oral rinsing with sodium hypochlorite (used long-term) to reduce dental biofilm buildup and prevent gingival inflammation

\*Modified from Slots and Slots.<sup>9</sup>

**Jorgen's protocol for refractory or advanced disease;**

**Resource Sheet for**  
**Minimally Invasive Anti-Microbial Treatment for Advanced Periodontitis**

1. The Ins and Outs of Periodontal Antimicrobial Therapy  
Michael G. Jorgensen, DDS, Jorgen Slots, DDS, DMD, PhD, MS, MBA  
April 2002; J of California Dental Association
2. Selection of Antimicrobial Agents in Periodontal Therapy  
Jorgen Slots DDS  
J Periodontal Research 2002, vol 37 p. 389
3. Low Cost Periodontal Therapy (very comprehensive review of the methods and background)  
Jorgen Slots DDS  
Periodontology 2000 Vol 60, 2012, p. 110 – 137
4. \*\*A Commentary on periodontal treatment. J. West Soc Perio 2018:66 – good review of his latest protocol.
5. \*\*Focal Infection of Periodontal Origin; Periodontol 2000. 2019;79:233–235.  
Excellent and short summary

**Microbiology Testing**

MicrobeLinkDx  
Call/Text Jennifer at 615-587-2558  
[info@MicrobeLinkDx.com](mailto:info@MicrobeLinkDx.com)

**Microscopes, Antimicrobial solutions, Professional Irrigators**  
**(For subgingival irrigation with TheraSol use 8:1 dilution with Concentrate)**

**AmScope** - more affordable microscope products – must upgrade to **Phase Contrast**  
Phone - 1-866-592-3271 Email - Sales@MicroscopeCentral.com  
**OraTec** 800-368-3529; Bill Landers, President  
www.oratec.net sales@oratec.net

**Irrigation for subgingival access**

**1). Pik Pocket Tips with WaterPik** Available from Water Pik, Inc (Patients can order directly off web site\*) \* (See “Home Irrigation Instructions” for correct model numbers)  
<http://professional.waterpik.com/> 800-525-2020.

**2). Viajet** from OraTec and canula

**Toothbrushes**

Toothbrushes and Interdental Brushes www.Curaden.us Professional Division  
(800) 919-0120 Support@Curaden.us

*Put your own letterhead here*

***Anti-microbial Treatment for Managing Periodontal Disease***  
**HOME IRRIGATION SUGGESTIONS**

Current research has provided growing information which tells us how benefits are obtained by irrigating under the gum line. As you know, bacteria hide under the gum line and cause the low grade periodontal infection which leads to bone loss. The treatment we have done was designed to disrupt, detoxify, devitalize and disperse those bacteria which grow under the gums, and to seal the gums back to the teeth where possible.

Simply using household bleach (CLOROX) is an effective way to manage this infection. It is a strong and effective antiseptic, but be careful, and **WATCH GETTING IT ON CLOTHES.**

We recommend a mix on one (1) teaspoon of regular (Blue Cap) Clorox in 200-300 ml of water in your Water Pik reservoir. This dilutes to a concentration that is totally safe when used as directed. NOTE: A fresh mix must be made each time.

It is recommended that you use this **only two times per week** with the irrigator set to medium, or lower if more comfortable, and that you use the small **Pik Pocket Tip** available for Water Pik brand products, or similar small tips are available for ViaJet from OraTec.

Pik Pocket Tip styles for Teledyne WaterPik devices:  
**PP-100 for newer models of irrigator**  
**PP-70 for older Classic models of irrigator**  
(Water Pik, Inc 800-525-2020) (ViaJet from OraTec 800-368-3529)

Aim it down into the gums. Hold for 5 seconds between each tooth or longer in problem areas. Be sure to put the irrigator tip in your mouth before turning on the unit, and bend over the sink, allowing the water to flow into the sink.

We also urge **the daily use of Fluoride** when on this program.

Note: Bleach will cause the Water Pik to break down sooner, and may require replacement every year or two. A longer lasting water irrigator is ViaJet from Oratec.

**Again: WATCH GETTING CLOROX ON CLOTHING!**

**An ALTERNATIVE to irrigating with the Clorox is RINSING. It is almost as effective as irrigation. If you prefer this method mix with 1 teaspoon of 8.25% Clorox, or 1.5 teaspoon of 6% Clorox to a large 8 oz glass of water (fresh each time).**

NOTE: The American Dental Association has designated this dilution of bleach as a "mild antiseptic mouth rinse that is safe".

**A few drops of Peppermint liquid flavor from the baking isle can help with taste.**

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