

# CRA FORM

First name: \_\_\_\_\_ Last name: \_\_\_\_\_ Date: \_\_\_\_\_

Adults and Children Age 6+

Due to new research on cavities and what causes them, we know everyone is at risk of developing decay at some point during their lifetime. The goal of this assessment form and the bacterial screening test is to determine your likelihood of experiencing new decay in the next 12 months. Please fill out the "Patient Use" section of this form to the best of your ability. These items will be discussed with your dental professional during your appointment today. Questions about this form? See the back for Q&A.

PATIENT USE

<b>Would you like a free bacterial screening test to help determine your risk for cavities?</b> (The test is a quick, painless swab of your teeth.)	<input type="checkbox"/> yes	<input type="checkbox"/> no
If diagnosed at risk for cavities today, would you be interested in discussing treatment options?	<input type="checkbox"/> yes	<input type="checkbox"/> maybe <input type="checkbox"/> no
If needed, are you willing to modify your dietary habits?	<input type="checkbox"/> yes	<input type="checkbox"/> maybe <input type="checkbox"/> no

## RISK FACTORS

Do you notice plaque build-up on your teeth between brushings?	<input type="checkbox"/> no	<input type="checkbox"/> yes
Do you take medications daily? If yes, how many? (#_____)	<input type="checkbox"/> no	<input type="checkbox"/> yes
Do you feel like you have a dry mouth at any time of the day or night?	<input type="checkbox"/> no	<input type="checkbox"/> yes
Do you drink liquids other than water more than 2 times daily between meals?	<input type="checkbox"/> no	<input type="checkbox"/> yes
Do you snack daily between meals?	<input type="checkbox"/> no	<input type="checkbox"/> yes
Do you have oral appliances present?	<input type="checkbox"/> no	<input type="checkbox"/> yes
Do any of these other health concerns apply to you? (check all that apply)	<input type="checkbox"/> no	<input type="checkbox"/> yes
<input type="checkbox"/> Frequent tobacco use <input type="checkbox"/> Other drug use <input type="checkbox"/> Acid reflux <input type="checkbox"/> Bulimia <input type="checkbox"/> Diabetes <input type="checkbox"/> Sjogren's Syndrome <input type="checkbox"/> Head/neck radiation therapy		

## DISEASE INDICATORS

New/Progressing Visible Cavitations	<input type="checkbox"/> no	<input type="checkbox"/> yes
New/Progressing Approximal Radiographic Radiolucencies	<input type="checkbox"/> no	<input type="checkbox"/> yes
New/Active White Spot Lesions	<input type="checkbox"/> no	<input type="checkbox"/> yes
Decay History is a Concern	<input type="checkbox"/> no	<input type="checkbox"/> yes

## BIOFILM CHALLENGE

CariScreen Bacterial Assessment (0-1500 low, 1501-9999 high)	<input type="checkbox"/> low	<input type="checkbox"/> high
--	------------------------------	-------------------------------

## PROFESSIONAL ASSESSMENT SUMMARY

Risk Factors are a Concern	<input type="checkbox"/> no	<input type="checkbox"/> yes
Disease Indicators are a Concern	<input type="checkbox"/> no	<input type="checkbox"/> yes
Biofilm Challenge is a Concern	<input type="checkbox"/> no	<input type="checkbox"/> yes

## RISK IDENTIFICATION

Transfer information above to boxes below to determine risk.

<input type="checkbox"/> N <input type="checkbox"/> Y <input type="checkbox"/> Risk Factors <input type="checkbox"/> Disease Indicators <input type="checkbox"/> Biofilm Challenge	<input type="checkbox"/> N <input type="checkbox"/> Y <input type="checkbox"/> Risk Factors <input type="checkbox"/> Disease Indicators <input type="checkbox"/> Biofilm Challenge	<input type="checkbox"/> N <input type="checkbox"/> Y <input type="checkbox"/> Risk Factors <input type="checkbox"/> Disease Indicators <input type="checkbox"/> Biofilm Challenge	<input type="checkbox"/> N <input type="checkbox"/> Y <input type="checkbox"/> Risk Factors <input type="checkbox"/> Disease Indicators <input type="checkbox"/> Biofilm Challenge	<input type="checkbox"/> N <input type="checkbox"/> Y <input type="checkbox"/> Risk Factors <input type="checkbox"/> Disease Indicators <input type="checkbox"/> Biofilm Challenge
---	---	---	---	---

**LOW RISK**

**MODERATE RISK**

**HIGH RISK**

**HIGH RISK**

**HIGH/EXTREME RISK**

**1**

**2**

**3**

**4**

**5**

CLINICIAN USE ONLY

RECOMMENDED     PROVISIONAL     DECLINE

Biofilm Challenge # \_\_\_\_\_ Patient Initial \_\_\_\_\_

**Q: What is the CRA Form?**

A: The CRA Form is a questionnaire for Caries Risk Assessment. Caries is the bacterial infection that causes cavities. This infection occurs when the oral environment is out of balance due to risk factors for the infection and an increase in cavity-causing bacteria. Caries Risk Assessment helps both patients and dental professionals identify if a patient has a risk of experiencing decay in the future and if potential measures can be taken to reduce risk. Caries Risk Assessment is recommended by the ADA, CDA, FDA, Eastern and Western CAMBRA Coalitions, Western Regional Examining Board, and is taught in the majority of dental schools.

**Q: Why should I choose to be screened to determine my risk?**

A. Screening for the bacterial infection allows the patient and the dental professional to identify if there are high numbers of cavity-causing bacteria in the oral biofilm. If high numbers are found, the dental professional can recommend antibacterial treatment options. High numbers of cavity-causing bacteria is a key indicator of future dental decay. It is possible to have a current cavity and a low screening result, as well as have no current cavities and a high screening result. Bacterial screening is the best indicator of future decay and is not used to assist in diagnosing current decay. It can also act as a baseline test to see if treatment recommendations are working when patients are retested at recall appointments.

**Q: How do dietary habits affect my caries risk?**

A: Dietary habits affect the balance within the oral environment. In many cases, simple dietary habit changes can be the least expensive option and extremely effective in reducing caries risk.

**Q: What are risk factors?**

A: Risk factors are important as they are indicators of potential for future decay. The modification of risk factors is an important part of managing caries risk.

**Q: Why is "plaque build-up on my teeth" a risk factor?**

A: Although not all dental plaque is cavity-causing, regular build-up of plaque between brushings is an indicator of excessive bacterial load and is a risk factor for decay.

**Q: Why are the medications I take important?**

A: It is important that patients share all medications and dietary supplements or vitamins they take with their dental professional, whether over-the-counter or prescription. Thousands of over-the-counter and prescription medications can cause a reduction in saliva (dry mouth/xerostomia), the body's natural protection mechanism for the teeth. Medication induced dry mouth can have a severely negative effect on the oral environment and increase the potential for future decay.

**Q: How does drinking and snacking between meals affect my risk?**

A: Every time we eat or drink the pH in our mouth becomes acidic. The more often we eat and drink, the more often the pH is acidic in our mouth, giving the cavity-causing bacteria an opportunity to thrive. Below is a graph showing the differences between two individuals' dietary habits. At a pH below 5.5 our teeth begin to demineralize and cavity-causing bacteria begin to take over our biofilm.

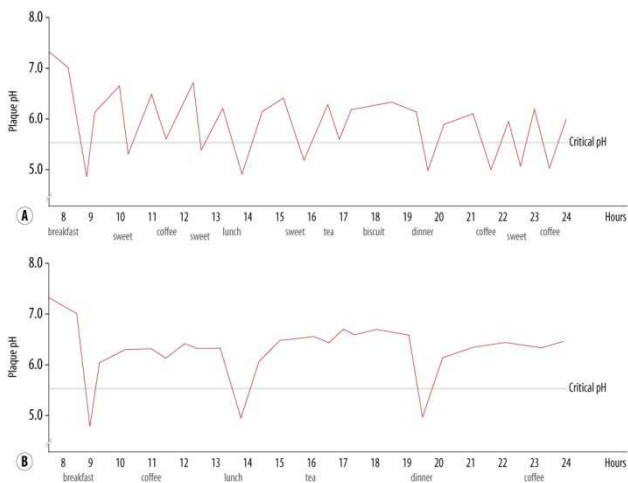


Fig 2.3 Schematic representation of the changes in plaque pH in an individual who (A) has frequent intakes of fermentable carbohydrate during the day, or (B) limits their carbohydrate intake to main meals only. The critical pH is the pH below which demineralization of enamel is enhanced.

**Q: How can dry mouth increase my risk?**

A: Saliva is the body's natural defense against cavity causing bacteria. Saliva neutralizes the pH of the mouth when the environment becomes acidic and it contains the necessary nano-particles of calcium and phosphate that help rebuild teeth and keep them healthy. Inadequate saliva flow (xerostomia) can dramatically increase a patients risk for future decay.

**Q: What is an oral appliance and how does it affect my risk?**

A: Oral appliances are braces, night guards, bleaching trays, ortho retainers, and partial dentures. An oral appliance reduces saliva exposure to the teeth and creates artificial areas that are hard to clean and allow bacteria to thrive.

**Q: How do other health concerns such as tobacco use and acid reflux affect my risk?**

A: The other health concerns listed on the form can have severe effects on the acidity and salivary flow of the oral environment. These risk factors can place a patient at extreme risk of experiencing future decay.

**Q: What are disease indicators?**

A: Disease indicators are the symptoms of the caries infection (they include new/progressing visible cavitations, new/progressing approximal radiographic radiolucencies, new/active white spot lesions, and decay history is a concern). If disease indicators are present, studies show it is the number one indication of risk for future decay.

**Q: What is a biofilm challenge and the "CariScreen Bacterial Assessment"?**

A: The CariScreen Bacterial Assessment is a screening test where a swab sample is taken from the teeth and assessed for the amount of ATP (adenosine tri-phosphate) present. High levels of ATP correlate to high levels of bacteria, and specifically high levels of cavity-causing bacteria. The level of bacteria on the teeth is often referred to as "biofilm challenge".

**Q: How does the risk identification take place?**

A: The dental professional will assess the three main areas of caries risk assessment: presence of risk factors, presence of disease indicators, and biofilm challenge. Based on these elements, a diagnosis from low to high/extreme risk will be established. Patients diagnosed with cavities will also need to promptly have restorations performed to remove the areas of bacterial infection that have caused decay.

**Q: What happens if I am identified as high risk?**

A: Based on the diagnosed risk category, the patient will have a choice of 3 treatment options: Recommended Therapy, Provisional Therapy, and Decline. The Recommended Therapy is often more expensive and requires more effort on the part of the patient to comply with the treatment recommendations, and is also the most effective options for treating the bacterial infection and reducing caries risk.

**Q: What will I have to do during treatment?**

A: Often a simple change in the product regimen used at home, including oral rinses and toothpastes/gels, is all that is necessary for treatment. Occasionally other products such as mouth sprays and gum will be recommended. The dental professional will also likely suggest an in-office fluoride treatment as recommended by the ADA.

**Q: How long will treatment last?**

A: Treatment time varies from patient to patient and the most important factor is how well the patient adheres to the treatment program outlined by the dental professional. In some cases, the patient may also need to reduce risk factors by changing dietary habits, making changes to medication usage (if possible), and/or add more products to their treatment regimen. If a patient fully adheres to the dental professionals treatment recommendations, treatment times vary from 3-36 months depending on the number and severity of risk factors. The majority of patients see results in 12 months or less.

**Q: How will I know if treatment has been successful?**

A: When a patient has a low biofilm challenge, has modified all possible risk factors, and has no disease indicators, treatment has been successful and a maintenance program is recommended.