

## Pre-Clinical and Clinical Goal Development Planner

developed goals are clear, detailed, and unambiguous. Use this template to develop a specific, measurable, achievable, relevant, attainable, and time-bound (SMART) pre-clinical or clinical goal. Answer each of the questions you focus on your goal – what you want to accomplish and why.

<b>S</b>	<b>Specific</b>	<p>What do I want to accomplish?</p> <p>Why do I want to accomplish this? (What is the reason/purpose? What are the benefits?)</p> <p>What are the requirements?</p> <p>Are there any constraints? (If so, identify them. If there are no constraints, note no constraints.)</p>	<ol style="list-style-type: none"> <li>1. I want clients to be aware of how different types of toothpastes address different dental problems and help them implement the correct type of toothpaste.</li> <li>2. Dental hygiene appointments are brief meaning the majority of the client's oral status is determined by their daily oral hygiene regimen. Giving them appropriate tools to address their problem will allow them to be more successful in treating the problem.</li> <li>3. In order to construct the pamphlet, I will research different companies and their product lines in order to differentiate between usage. I will identify different active ingredients and reach corresponding scientific research to gain a better understanding of how the ingredient interacts with tooth structure at the molecular level.</li> <li>4. There is a possibility of financial constraints as each product is not priced equally.</li> </ol>
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M	measurable	<p>How will I measure whether the goal has been reached?</p> <p>How will I know I have succeeded in reaching my goal?</p> <p>(include at least 2 measurable indicators. Be specific.)</p>	<p>5. In order to achieve the goal, the client should be able to relate their dental problem to the corresponding toothpaste which will help manage the problem (eg sensodyne sensitivity toothpaste to address tooth sensitivity)</p> <p>6. The client will explain to me the rationale to choosing the toothpaste and explain how the toothpaste helps manage their dental problem. The client will agree to purchasing a new toothpaste.</p>
A	attainable	<p>Do I have the necessary knowledge, skills, abilities, and resources to accomplish my goal?</p> <p>How can the goal be accomplished?</p> <p>What steps can I take to achieve my goal?</p> <p>10. Will meeting the goal challenge me without defeating me?</p>	<p>7. I have a baseline knowledge however this requires more throughout understanding of the underlying mechanisms of toothpastes. In order to gain needed knowledge, I will utilize resources such as PubMed, Cochrane Library and peer reviewed articles.</p> <p>8. The goal can be accomplished by conducting research of the purpose of 5 types of toothpastes and their application in meeting client needs (e.g. general use, sensitivity, whitening, gum health and enamel protection). Next the finding will be presented on a pamphlet in order to more efficiently communicate findings to clients.</p> <p>9. Step1: Research and collect data Step 2: Compare and contrast Step 3: Evaluate the uses of type of toothpaste based on the dental problem Step 4: Organize finding onto a pamphlet and present to client</p> <p>10. Meeting this goal is challenging however engaging as it allows me to gain a better understanding of the aids I have been recommending to clients thus far. It allows me to</p>

			reflect on clinical practice and incorporate research skills in order to incorporate evidence based practice
R	Relevant	<p>1. Is this a worthwhile goal?</p> <p>2. Is it meaningful for me? Why? (or is it just something others would want me to do?)</p> <p>3. Is this goal in line with my long-term objectives? Explain.</p>	<p>11. Yes, I think this is a worthwhile goal as it enhances my understanding and my client's understanding on the rationale of which oral hygiene aids to implement</p> <p>12. Yes, it is meaningful because it answers the "why" associated with oral hygiene recommendations. Considering I have been recommending aids to clients, undertaking this will ensure I am providing recommendations based on the most relevant information.</p> <p>13. Yes, my primary goal is to become a good clinician which includes providing clients with the right tools to address their concerns. My knowledge about what is appropriate greatly affects the client's ability to manage their problem.</p>
T	Time Bound	<p>4. How long will it take me to achieve my goal?</p> <p>5. What is the deadline for completion of the goal?</p> <p>6. Will I be able to accomplish all the steps needed to achieve my goal within the established time frame?</p>	<p>14. It will take 1-2 weeks to achieve this goal as it requires constructing a pamphlet and communicating it to the client</p> <p>15. The deadline for this goal will be April 21, 2025</p> <p>16. Yes, it is a reasonable time frame considering the start of the clinic and time required to complete treatment of a client.</p>

**Goal Statement** (one sentence only): *I will (action word/s) in order to (measurable object of the goal) by (date) for the purpose of (relevance/results).*

I will create and distribute a pamphlet outlining 5 toothpaste options to address common dental concerns by April 21, 2025, for the purpose of providing clients with specialized care by helping them choose oral hygiene products specific to their needs.

## **Clinical Goal Completion Report**

Name: Vishav Sidhu

Cohort: April 2024

Due Date: April 3, 2025

### **Part 1: Goal Development**

I will create and distribute a pamphlet outlining 5 toothpaste options to address common dental concerns by April 21, 2025, for the purpose of providing clients with specialized care by helping them choose oral hygiene products specific to their needs.

### **Part 2: Goal Attainment**

#### **B. Indicate the learning activities you engaged in to attain your goal**

The learning activities I partook in consisted of research articles from various sources such as PubMed, Cochrane Library and others to expand on my knowledge about toothpastes and their contribution to oral hygiene status. Upon my query for new insights on the topic I gained a certificate from Colgate Oral Health regarding tooth whitening, nanohydroxyapatite and managing dentinal hypersensitivity. This course explored the deterioration of tooth structure and how ingredients in toothpaste left offset those changes. Each course concluded with a quiz testing my knowledge on the learned material contained within the article.

Course taken on  
www.colgateoralhealthnetwork.com

Certificate ID: 6EBTF

## VERIFICATION OF PARTICIPATION

### An Update on Tooth Whitening

Fiona Collins, BDS, MBA, MA, PFFA

C.E. Credit: **1 Online C.E. Credit**. Educational method: **Article**  
Course date: **Wed. Apr. 2 2025/ duration 1 hour(s)**  
Quiz date and time: **Wed. Apr. 2 2025, 12:40 PM EST (New York)**

#### MEMBER CONTACT INFO:

Name: Mr. Vishav Sidhu  
Profession: N/A  
Country: Canada  
State: N/A  
City: Georgetown  
Address: 14 bishop court  
Email: v74008368@gmail.com

This document verifies that the individual referenced above has met the complete requirements of the course referenced above for awarding ACD PACE continuing education credits.

**PARTICIPANTS:** CE credits issued for participation in the course may not apply toward license renewal in all licensing jurisdictions. It is the responsibility of each participant to verify the CE requirements of his/her licensing or regulatory agency. Participants should retain this document for their records. Tribune Group designates this activity for continuing education credit(s). This continuing education activity has been planned and implemented in accordance with the standards of ACD PACE through joint efforts between Tribune Group and Colgate Oral Health Network.



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Tribune Group  
116-35 Queens Blvd, Suite 402  
Forest Hills, NY 11375, USA  
www.tribunegroup.com

Course taken on  
www.colgateoralhealthnetwork.com

Certificate ID: 6EBTO

## VERIFICATION OF PARTICIPATION

### Nanohydroxyapatite: Trends and Current Status

Fiona Collins, BDS, MBA, MA, PFFA

C.E. Credit: **1 Online C.E. Credit**. Educational method: **Article**  
Course date: **Wed. Apr. 2 2025/ duration 1 hour(s)**  
Quiz date and time: **Wed. Apr. 2 2025, 12:46 PM EST (New York)**

#### MEMBER CONTACT INFO:

Name: Mr. Vishav Sidhu  
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State: N/A  
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Course taken on  
www.colgateoralhealthnetwork.com

Certificate ID: 6EBTU

## VERIFICATION OF PARTICIPATION

### Preventive Dentistry How do Dentists Manage Dentinal Hypersensitivity?

Fiona Collins, BDS, MBA, MA, PFFA, Ira Lamster, DDS, MMSC

C.E. Credit: **2 Online C.E. Credits**. Educational method: **Article**  
Course date: **Wed. Apr. 2 2025/ duration 2 hour(s)**  
Quiz date and time: **Wed. Apr. 2 2025, 12:49 PM EST (New York)**

#### MEMBER CONTACT INFO:

Name: Mr. Vishav Sidhu  
Profession: N/A  
Country: Canada  
State: N/A  
City: Georgetown  
Address: 14 bishop court  
Email: v74008368@gmail.com

This document verifies that the individual referenced above has met the complete requirements of the course referenced above for awarding ACD PACE continuing education credits.

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www.tribunegroup.com

Activity	Citation / Course or Webinar Information	Number of Hours	Other details
1	<p>Cury J, Maria L ,Tenuta A. Evidence-based recommendation on toothpaste use [Internet]. 2014 Jan 14 [Cited 2025 April 2]. Available from:  <a href="https://pdfs.semanticscholar.org/4036/2db86d119c5ad065011b9b82f260dd5d6945.pdf">https://pdfs.semanticscholar.org/4036/2db86d119c5ad065011b9b82f260dd5d6945.pdf</a></p>	1	
2	<p>World Health Organization. Fluoridated Toothpaste [Internet] 2021 [Cited 2025 April 2]. Available from:  <a href="https://cdn.who.int/media/docs/default-source/essential-medicines/2021-eml-expert-committee/applications-for-addition-of-new-medicines/a.14_fluoride-toothpaste.pdf?sfvrsn=4eb40f4c_4">https://cdn.who.int/media/docs/default-source/essential-medicines/2021-eml-expert-committee/applications-for-addition-of-new-medicines/a.14_fluoride-toothpaste.pdf?sfvrsn=4eb40f4c_4</a></p>	1	
3	<p>Bal B, Pehlivan S, Simsek O, Suludere Z, Uraz A. The Efficacy of 8% Arginine- CaCO<sub>3</sub> applications on dentine hypersensitivity following periodontal therapy: A clinical and scanning electron microscopic study [Internet]. 2013 March [Cited 2025 April 2] 18(2):299. Available from:  <a href="https://pmc.ncbi.nlm.nih.gov/articles/PMC3613884/pdf/medoral-18-e298.pdf">https://pmc.ncbi.nlm.nih.gov/articles/PMC3613884/pdf/medoral-18-e298.pdf</a></p>	1	
4	<p>Bal B, Pehlivan S, Simsek O, Suludere Z, Uraz A. The Efficacy of 8% Arginine- CaCO<sub>3</sub> applications on dentine hypersensitivity following periodontal therapy: A clinical and scanning electron microscopic study [Internet]. 2013 March [Cited 2025 April 2] 18(2):299. Available from:</p>	1	

	<a href="https://pmc.ncbi.nlm.nih.gov/articles/PMC3613884/pdf/medoral-18-e298.pdf">https://pmc.ncbi.nlm.nih.gov/articles/PMC3613884/pdf/medoral-18-e298.pdf</a>		
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5	Aryal S, Hashin N, Islam S, Naser A, Padamanabhan V, Shanati K. Comparative Analysis of Whitening Outcomes of Over-the-Counter Toothpastes: An in Vitro Study. Dent J [Internet]. 2025 Jan 22 [Cited 2025 April 2] 13(25): 9. Available from: <a href="https://www.mdpi.com/2304-6767/13/2/45">https://www.mdpi.com/2304-6767/13/2/45</a>	1	
6	Acherkouk A, Amini P, Butler A, Patel N. A randomized clinical study investigating efficacy of stannous fluoride toothpaste in improving gingival health after 3 weeks' use [Internet]. 2021[Cited 2025 April 2] 12(1): 441-2. Available from: <a href="https://pmc.ncbi.nlm.nih.gov/articles/PMC8436562/pdf/12903_2021_Article_1727.pdf">https://pmc.ncbi.nlm.nih.gov/articles/PMC8436562/pdf/12903_2021_Article_1727.pdf</a>	1	
7	F. Collins, Lamster I. Colgate Oral Health Network for Professional Education and Development. Preventative Dentistry How do Dentists Manage Dentinal Hypersensitivity? [Internet]. 2018 Oct 31 {cited 2025 March 21}. Available from: <a href="https://dmhuk8np1ucwy.cloudfront.net/up/2018/10/Preventive-Dentistry-How-do-Dentists-Manage-Dentinal-Hypersensitivity-2.pdf">https://dmhuk8np1ucwy.cloudfront.net/up/2018/10/Preventive-Dentistry-How-do-Dentists-Manage-Dentinal-Hypersensitivity-2.pdf</a>	1	
8	F. Collins. Colgate Oral Health Network for Professional Education and Development. Nanohydroxyapatite: Trends and Current Status [Internet]. 2015 Jan 14 {cited 2025 March 21}. Available from: <a href="https://dmhuk8np1ucwy.cloudfront.net/up/2025/01/Nanohydroxyapatite-Trends-and-Current-Status.pdf">https://dmhuk8np1ucwy.cloudfront.net/up/2025/01/Nanohydroxyapatite-Trends-and-Current-Status.pdf</a>	1	

9	<p>F. Collins. Colgate Oral Health Network for Professional Education and Development. An Update on Tooth Whitening[Internet]. 2021 Dec 7 {cited 2025 March 21}. Available from:  <a href="https://dmhuk8np1ucwy.cloudfront.net/up/2021/12/An-Update-on-Tooth-Whitening-2.pdf">https://dmhuk8np1ucwy.cloudfront.net/up/2021/12/An-Update-on-Tooth-Whitening-2.pdf</a></p>	1	
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**C. Describe how the continuing quality improvement (CQI) activity(ies) are directly related to your clinical goal.(Included in-text citations if warranted)**

Continuing quality improvement activities such as creating and continually adding a pamphlet relate to ensuring that the chart includes new products with up-to-date research. “Through the iterative process, improvements are made, the effect of the improvements is measured, then the process is repeated until the desired outcome is achieved”(O’Donnell and Gupta 2023). This is related to my clinical goal because, upon completion of each goal, it should be evaluated to determine areas of strength and areas of improvement. The goal can be updated based on the findings or through iterations of applying the goal to different clients. This applies to oral hygiene recommendations considering a clinician's goal should be providing specialized care to each client. There needs to be a discussion with the client and clinician regarding this. For example, if a client is at moderate risk of caries progression recommendation of Colgate total over Colgate president would be a disservice. Despite Colgate having the same ingredient it is not to the same concentration as the preident, making it not as effective to treat the problem. Each client case should be seen independently as it allows the clinician to gain a more thorough understanding of the matter at hand. Providing a broad set of aids does a disservice to the client as it is not as effective as products designed to manage their concerns. To prevent client



negligence a clinician should engage in continuous quality improvement to ensure optimal client care.

**D) Explain, *in detail*, what you learned about the topic (be specific) by completing this goal assignment.**

Through the process of constructing the pamphlet, I utilized many scholarly research articles to help me understand the difference between toothpaste and its active ingredients. The toothpastes implemented were for five different purposes including general use, sensitivity, whitening, gum health, and enamel protection or caries prevention. To maintain the dentition irrespective of any problems clients should be advised to use fluoridated toothpaste. “Therefore, based on the best available evidence for recommending fluoride toothpaste use considering the balance of its benefits and risks, a conventional fluoride toothpaste (1000-1500ppm F) should be used by all individuals, irrespective of age”(Cury et al, 2014). This dose allows the active ingredient to work effectively to protect the integrity of the enamel through its mechanism of action. “Given the high fluoride concentration present in toothpastes (1000-1500 ppm F), it is expected that they react with tooth surfaces forming a calcium fluoride-like reservoir that is released in between brushing”(Cury et al, 2014). In contrast to dosing another competent is frequency as both are needed to ensure optimal preventative measures are implemented. “Twice daily use of fluoride toothpaste for toothbrushing is an effective way to prevent dental caries among infants, children, adults, and seniors.” (WHO, 2021).

Comparing the active ingredients from one toothpaste to another allowed me to gain a greater understanding of chemical interactions and how they work to protect tooth structure. For example, the active ingredient of a toothpaste addressing sensitivity differs from one addressing caries progression which means each type of toothpaste will produce a different reaction when

brought in contact with the tooth structure. “Kleinberg proposed that the combination of arginine and calcium carbonate can deposit on exposed dentin surfaces to physically block and seal open dentin tubules and reduce dentin hypersensitivity, mimicking saliva’s natural process (Halappa et al 2015, p.29 ). Toothpaste used to address sensitivity contains desensitizing agents, such as arginine and calcium carbonate, which work with the natural mechanisms in the oral cavity to alleviate discomfort from the patient. “These studies confirm that this technology works differently than other technologies that occlude dentin tubules in that: 1) arginine and calcium are also naturally found in saliva; and 2) arginine and calcium carbonate work together to accelerate the natural mechanisms of occlusion by depositing a dentin- like material, containing calcium and phosphate, within the dentin tubules to form a plug and a protective layer on the dentin surface, thereby repairing sensitive parts of teeth.” (Delgado et al 2011, p.20). The mechanism of action varies from other toothpastes due to the active ingredients and how they are designed to interact with the tooth structure.

As whitening toothpaste becomes more prevalent due to their aesthetic appeal it is important to understand how their chemical processes differ from standard toothpaste. “Carey CM, 2014, explained that hydrogen peroxide penetrates the enamel and breaks down chromogenic compounds through an oxidation process, which can facilitate teeth whitening” (Aryal et al 2025, p.9). Hydrogen peroxide is the active ingredient that is responsible for the whitening effect appreciated by clients. “The whitening dentifrice group had statistically significant ( $p < 0.0001$ ) mean shade score reductions of 1.82 and 2.57 from baseline to weeks 4 and 6, respectively. For the same period, the negative control dentifrice group was virtually unchanged from baseline”(DeSciscio et al 2012, p.90). Clients need to understand the active ingredients so they are not misled by the packing labels of toothpaste. Teaching clients to read

the ingredient list of products can help them understand the therapeutic effect that comes with each type of toothpaste.

As part of being a clinician is managing and preventing the progression of periodontal disease, understanding how toothpaste can play a role in achieving that goal has allowed me to understand the importance of the oral hygiene regime implemented by patients. "In this study, a toothpaste containing the antimicrobial agent stannous fluoride (SnF<sub>2</sub>) was investigated due to the antimicrobial properties of stannous ions (Sn [II]), which have been shown to reduce bacterial biomass/ virulence and inhibit bacterial metabolism"(Acherkouk 2021, p.2). The active ingredient stannous fluoride provides a therapeutic effect that combats the presence of pathogenic bacteria in the oral cavity. Incorporating toothpaste with the following ingredient can help alleviate manifestations of periodontal disease. "Three weeks' twice-daily brushing with the 0.454% w/w stannous fluoride Test toothpaste compared to the Control toothpaste led to statistically significant lower gingival bleeding, gingival inflammation, and plaque levels in adults with mild-moderate gingivitis"(Acherkouk 2021, p.2). Another active ingredient present in toothpaste addressing periodontal disease is triclosan. Triclosan has been proven to address gingival inflammation despite its different mechanism of action. "In the context of inconclusive results for the primary outcome variable of gingival health, it can be concluded that there was a minor and most likely clinically insignificant difference between Tcs and SnF-containing dentifrices" (Kumar 2015, p.1).

One of the most common dental concerns verbalized by clients is caries progression. Through the research conducted, I have learned that the relationship between fluoride and enamel protection is dose-dependent. "Finally, a meta-analysis of standard and experimental toothpaste at fluoride concentrations ranging from 1700 ppm, 2200, and 2800 ppm F relative to

1000 ppm F reported caries preventive effect of higher fluoride concentration, though this was only statically significant at the 2800 ppm F level (Glenny et al 2019, p.36). This suggests that recommending toothpaste such as Prevident 5000 which contains substantially greater amounts of PPM would be more effective in caries prevention. The difference between standard toothpaste and toothpaste directed at treating caries progression lies in the concentration of fluoride. All toothpastes are not created equally and this can be seen by comparing the active ingredients and understanding their mechanism of action. The purpose of each toothpaste is dependent on the specificity of the client's needs and it is the role of the clinician to help the client match the client's dental concern with the appropriate toothpaste. As the client gains a greater understanding of the value of each type of toothpaste they will be more invested in implementing the right type of toothpaste for them.

### **Part 3: Evaluation of Goal Achievement**

**E. Explain, *in detail*, how you have changed, or will change, your clinical practice because of what you have learned. (Included in-text citations if warranted).**

Undertaking this assignment has taught me many lessons that I can incorporate into my practice, one of which is acknowledging the importance of a client's at-home oral hygiene regimen. I have learned to link patient's chief concerns with their oral hygiene habits. For example, if they present with gingival bleeding I want to know about their regimen and if it includes appropriate brushing techniques and appropriate toothpaste which addresses gingivitis. Another example is if they present with dissatisfaction with the appearance of their teeth does their regime include toothpaste containing hydrogen peroxide? I have learned to analyze if the client is doing their due diligence or taking actions to address their concerns. If not, try to find the reasons whether it is due to lack of finances, lack of education, or other. Another learning experience I have learned

is relating assessments to the client's chief concern. If the client presents with sensitivity, try to understand which areas are sensitive and why. This can be done through periodontal charting and gingival assessments as it allows me to see signs of inflammation or progression of dental disease. This has given me a greater appreciation of the dental hygiene process as it has allowed me to understand the interconnectedness of the entire treatment process.

**F) Explain, *in detail*, how this learning will support or have a positive effect on your clients. If the learning will not support your clients, explain why not. (Include in-text citations if warranted - e.g., if referred to learning or motivation theories, etc.)**

Imparting the knowledge I have gained and implementing the appropriate toothpaste will help promote the longevity of their teeth. It will also provide them with a sense of autonomy as understanding the information allows them to deal with unforeseen dental problems independently. The knowledge I have gained about toothpaste will benefit my clients as I will be able to empower them to take action to address their oral health concerns. Showing them the importance of brushing twice daily and the impact it has on their health will give them a sense of responsibility. Rather than viewing dental health care professionals as a way to fix their problem they will view clinicians as guiding vehicles to help them achieve a greater health outcome based on the actions they take themselves.

## LITERATURE CITED

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Available

from: [https://cdn.who.int/media/docs/default-source/essential-medicines/2021-eml-expert-committee/applications-for-addition-of-new-medicines/a.14\\_fluoride-toothpaste.pdf?sfvrsn=4eb40f4c\\_4](https://cdn.who.int/media/docs/default-source/essential-medicines/2021-eml-expert-committee/applications-for-addition-of-new-medicines/a.14_fluoride-toothpaste.pdf?sfvrsn=4eb40f4c_4)

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[https://www.researchgate.net/publication/221690059\\_Comparison\\_of\\_clinical\\_efficacy\\_of\\_three\\_toothpastes\\_in\\_reducing\\_dentin\\_hypersensitivity](https://www.researchgate.net/publication/221690059_Comparison_of_clinical_efficacy_of_three_toothpastes_in_reducing_dentin_hypersensitivity)

DeSciscio P, Domke T, Ghassemi A, Hooper W, Nathoo S. Effectiveness of a new dentifrice with baking soda and peroxide in removing extrinsic stain and whitening teeth. J Dent [Internet] 2012 [Cited 2025 April 2] 23(3):86-91. Available from: <https://pubmed.ncbi.nlm.nih.gov/23210419/>

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**ASK YOURSELF...**

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**WHAT INGREDIENTS ARE IN THE TOOTHPASTE I AM USING ?**

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**DOES MY TOOTHPASTE CONTAIN ANY INGREDIENTS DESIGNED TO REDUCE SENSITIVITY ?**

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**WHICH TOOTHPASTE BEST MEETS YOUR NEEDS ?**

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**WHAT IS THE PURPOSE OF THESE INGREDIENTS ?**

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**DOES MY TOOTHPASTE CONTAIN ANY INGREDIENTS DESIGNED TO REDUCE BLEEDING ?**

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**ARE THESE INGREDIENTS HELPING ME SOLVE MY DENTAL PROBLEMS ?**



**ORAL HYGIENE TOOTHPASTE RECOMMENDATIONS**



ORAL HYGIENE AID - CREST PRO HEALTH ADVANCED	ORAL HYGIENE AID - COLGATE SENSITIVE PRORELIEF	
 <p>Active Ingredient - 0.454% Stannous Fluoride (0.16% w/v fluoride ion)</p> <p>Mechanism of Action - Fluoride ions form a chemical reaction with tooth enamel to produce fluoroapatite which functions to protect the integrity of the outer layer of tooth.</p> <p>Rationale - Implementation will prevent caries progression, prevent progression of periodontal disease, reduce plaque accumulation</p>	 <p>Active Ingredient - Calcium carbonate 35%, Arginine 8%, Sodium monofluorophosphate 1.1%</p> <p>Mechanism of Action - Forms a protective layer of hydroxyapatite on top of exposed dentin to seal the exposed dentin tubules thus reduces sensitivity.</p> <p>Rationale - Implementation increases protection against sensitivity to cold, heat, sweet or air</p>	
ORAL HYGIENE AID - SENSODYNE SENSITIVITY AND GUM	ORAL HYGIENE AID - COLGATE PREVIDENT 5000 PLUS	ORAL HYGIENE AID - CREST 3D WHITE PROFESSIONAL WHITNER TEETH
 <p>Active Ingredient - 0.454% Stannous Fluoride (0.11 w/v fluoride ion)</p> <p>Mechanism of Action - Stannous ions help reduce the presence of pathogenic bacteria by inhibiting bacterial metabolism.</p> <p>Rationale - Implementation reduces bacterial load, controls gingival bleeding, prevents plaque induced gingivitis</p>	 <p>Active Ingredient - 1.1% Sodium Fluoride, 5% potassium Nitrate</p> <p>Mechanism of Action - Fluoride ions form a chemical reaction with tooth enamel to produce fluoroapatite which functions to protect the integrity of the outer layer of tooth.</p> <p>Rationale - Implementation reduces caries progression more effectively than standard toothpaste due to high fluoride content</p>	 <p>Active Ingredient - 4% Hydrogen Peroxide</p> <p>Mechanism of Action - Implementation facilitates an oxidation process which breaks down chromogenic compounds</p> <p>Rationale - Implementation reduces the shade of the enamel</p>