
Crest Toothpaste Packaging Redesign

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Sustainable Packaging Design

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Table of Contents

Product Intro

Competitive Environment

Market Segments

Materials, Process, Waste & Energy

Supply Chain

Solutions

Crest Toothpaste Product Intro



The ubiquitous toothpaste tube can be found anywhere, with any toothpaste brand. Most brands, and product offerings of toothpaste offer several of the same key features, such as, “mint flavored”, “cavity protection”, “fights plaque”, “enamel protection”, “whitening”, and many more. With that being said- does the consumer really need to the packaging to give them guidance on which one to pick? Often the consumer goes back to the brand they know and love, or the one with the best bang for the buck. So why is the tube placed in an additional box, when the tube itself advertises all the same info? Is there a way for the consumer to get their same toothpaste in a refillable package? The age-old toothpaste bottle could be in need for a modern world and modern consumer update. This section is an overview of Crest Brand (Proctor & Gamble) toothpaste.

Competitive Environment



The Major Players



Shelf Shots

Big Box Grocery



Gas Station



Solo Shots



Arm & Hammer



Sensodyne



Crest



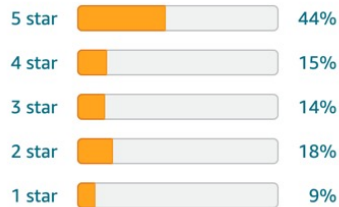
Colgate

Competitor Overviews; Crest

Customer reviews

★★★★☆ 3.7 out of 5

119 global ratings



[Write a review](#)

✓ [How customer reviews and ratings work](#)

Top positive review

[Positive reviews](#)

MyPenName **VINE VOICE**

★★★★★ Works!!

Reviewed in the United States on May 26, 2011

With everyday use - multiple times a day of course, this toothpaste really does whiten your teeth. I am a smoker and I can definitely tell a difference 100%. The mint taste is great and my mouth feels very clean and fresh after use. You don't taste any whitening ingredients or aftertaste as with some of the other whitening toothpastes. I have tried pretty much every whitening toothpaste out there from various brands and this is the first and only one where I could actually tell that it worked and worked well. The only downfall

Crest 3d White Toothpaste, Radiant Mint, 7.6 Ounce (Pack of 4) (Pa...
by Crest

Top critical review

[Critical reviews](#)

KO

★★★★☆ We didn't notice a difference

Reviewed in the United States on October 3, 2011

My husband loves crest, I on the other hand love all natural like Spry, I went ahead and tried this, we are on the third tube and neither of us notice a difference. We honestly couldn't tell the difference between his other crest toothpaste and my Spry toothpaste.

4 people found this helpful

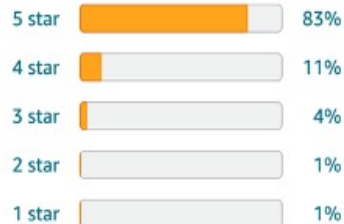
1. **Market Share:** 35%
2. **Company Mission:** “CREST builds capability, capacity, consistency and collaboration in the global cyber security industry through services that nurture, measure and enhance the performance of individuals and organizations”
3. **Vision Statement:** “Crest Healthcare will exceed customer expectations by delivering superior customer service, exceptional value and innovative products focused on our healthcare customers' needs. Success will be determined by financial measures and the degree of satisfaction derived by both our employees and customers”
4. **Target Consumer:** “Crest target audience is everyone who uses oral products for hygiene, including. professionals and dentists. Its target audience includes kids ages six to 16, as well as their. parents.” The Crest target demographic is very broad for the toothpaste business, child focused”

Competitor Overviews; Colgate

Customer reviews

★★★★★ 4.7 out of 5

25,442 global ratings



Write a review

▼ How customer reviews and ratings work

Top positive review

Positive reviews ›



Leo Dobkin

★★★★★ Great price!

Reviewed in the United States on November 17, 2023

Fast delivery and great price!

Top critical review

Critical reviews ›



Goldie

★★★★☆ Time to change the photos you have

Reviewed in the United States on November 17, 2023

I bought here specifically because I like the ones you have posted. But when received I was a bit disappointed to see it was the new style which has a different taste... loved the old design and the taste is very different....



Colgate Total Whitening Toothpaste Twin Pack - 6 Ounce (Pack of 2)

by Colgate

Flavor Name: Mint | Size: 6 Ounce (Pack of 2) | [Change](#)

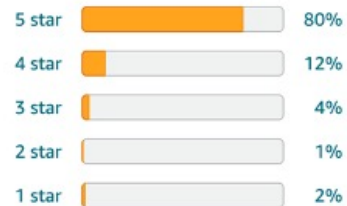
1. *Market Share:* 33.7%
2. *Company Mission:* “We are Colgate, a caring, innovative growth company reimagining a healthier future for all people, their pets and our planet”
3. *Vision Statement:* “We are united in making the world a better place. We believe that everyone deserves a healthier life. We lead with empathy, respect and gratitude. We act with integrity, doing things the right way, for the right reasons, no matter what.”
4. *Target consumer:* “Colgate Targets almost every segment by providing different products to each segment which helps them racing to a larger audience. Colgate mainly Targets people of the middle class and lower class”

Competitor Overviews; Arm & Hammer

Customer reviews

★★★★★ 4.7 out of 5

36,520 global ratings



ARM & HAMMER Advanced White Extreme Whitening Toothpaste, ...

by Arm & Hammer

[Write a review](#)

▼ [How customer reviews and ratings work](#)

Top positive review

[Positive reviews](#)



mariaelena m.

★★★★★ this really whitens your teeth

Reviewed in the United States on October 28, 2023

I have been using this product for awhile. I always receive compliments of how white my teeth are they think i got them professionally done. I got my sister hooked on this too. I have tried many products but this is the only one i can say that really works as does whitens your teeth and leave a clean taste in your mouth. thanks god bless

Top critical review

[Critical reviews](#)



JBB

★★★★★ Caused Urgent Care Visit! BEWARE!

Reviewed in the United States on July 5, 2022

I am a Colgate girl, but this was on sale, and I heard it was great for whitening, so I tried it. Each day of the first week, I hated the taste, and it sort of burned, but I figured it was doing its thing. By Day 8-9, I could barely brush because my gums were sore- never thought it was the toothpaste! Thought it was from spicy food. Day 10, my tongue is on fire! Then the inside of my cheeks and under my tongue were both burning, along with the deep part of my gums. I thought that was because I ate pineapples. Day 11, my lip

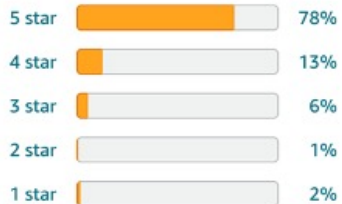
1. **Market Share:** 10%
2. **Company Mission:** “We create products that people know and trust. We give back to our communities through our Employee Giving Fund, which has awarded almost \$11MM to local charitable organizations in its lifetime and coordinates over 1,000 hours of community service annually”
3. **Vision Statement:** “EMPOWERING PEOPLE. You always find a way to get stuff done, and your ingenuity has been our inspiration for over 170 years. ARM & HAMMER™'s innovative products are specially designed to deliver smart, simple solutions, backed by our legendary Baking Soda, to help you tackle more of life's everyday challenges.”
4. **Target audience:** “We found that Arm & Hammer is a mission-driven company that values human and environmental health. They currently market to middle-age, female homeowners who want to take care of their families.”

Competitor Overviews; Sensodyne

Customer reviews

★★★★☆ 4.6 out of 5

1,620 global ratings



[Write a review](#)

▼ [How customer reviews and ratings work](#)

Top positive review

[Positive reviews](#) ›



Carolynn

★★★★★ CAN YOU GUESS which ingredient in Sensodyne Pronamel toothpaste "helps protect against acid erosion" ????

Reviewed in the United States on July 21, 2013

Which ingredient is the one that is helping protect your teeth against the acid erosion? Please don't spoil the surprise by going to the Sensodyne website just yet! I am a retired chemist with too much time on my hands, and I just had to know the answer to this question. OK, the information on the box of this toothpaste states that it "strengthens and re-hardens enamel to help protect against the effects of acid erosion" from liquids such as soda

Sensodyne Pronamel Gentle Whitening, Enamel Strengthening To...

by Sensodyne Pronamel

Style: old | [Change](#)

Top critical review

[Critical reviews](#) ›



Kathleen

★★★★☆ This is a good toothpaste for sensitive teeth but it doesn't whiten them.





Reviewed in the United States on January 10, 2018

I think my teeth have yellowed with age although my family says they look fine. I can't have my teeth whitened professionally nor use any home kits, because I have extremely sensitive teeth. I wasn't even sure I could use this toothpaste but luckily, it doesn't hurt my teeth.

As far as whitening, I use it at least twice a day; sometimes three times, and

1. **Market Share:** 35%
2. **Company Mission:** "Our mission is to provide lasting protection from tooth sensitivity. Since 1961, Sensodyne has been creating toothpastes specifically designed to help people overcome tooth sensitivity pain* while still providing other benefits such as cavity protection and breath freshening"
3. **Brand Promise:** "Sensodyne is a science and R&D-backed brand and our core promise is to offer long term and effective protection to sensitivity sufferers. We continue to bring innovation to the range, helping to meet the needs of consumers who suffer from sensitive teeth with products based on cutting-edge science"
4. **Target audience:** "Sensodyne a toothpaste marketed for individuals with sensitive teeth and those who wish to prevent sensitive teeth in the ages between 20 and 50".

Toothpaste Packaging Details

	Toothpaste Packaging Features						
	Image	Type	Size	Features	Price	Recyclability	Shelf Placement
Crest		Plastic Tube within Cardboard Box	5-6 oz, ~8" in length	Some came with multiple cardboard boxes in a set of three wrapped in plastic	\$3.97	Yes if cleaned	Eye Level, left side, multiple shelves
Colgate		Plastic Tube within Cardboard Box	5-6 oz, ~8" in length	Some came with multiple tubes, but in one single cardboard box	\$4.96	Yes if cleaned	Eye Level, Right side, multiple shelves
Arm & Hammer		Plastic Tube within Cardboard Box	5-6 oz, ~8" in length	Cardboard Box with tube inside	\$3.98	Yes if cleaned	Bottom left shelf
Sensodyne		Plastic Tube within Cardboard Box	5-6 oz, ~8" in length	Cardboard Box with tube inside. Less glitter foil than Crest or Colgate	\$6.98	Yes if cleaned	Eye level, center, multiple shelves

Market Segments

Product Review Themes



1

- Leaves sores in mouth



2

- Does not really white
- Does not leave the mouth feeling "minty"



3

- Sensitivity to brushing really does go away. This product really does help
- Overall taste is not great



4

- Overall leaves such a great clean feeling after brushing

Focus Group

Q&A



1. Q: Do you have a favorite brand of toothpaste you buy?

MA: Sensodyne.

2. Q: Why do you choose the toothpaste you buy? Price? Flavor? Brand? Most convenient to grab off the shelf?

MA: Brand.

3. Q: Does the type of toothpaste bottle inform your decision to purchase? I.e., flip top, screw top, tube vs. stand-up bottle?

MA: No, not really.

4. Q: Do you buy toothpaste in multi-bottle packages?

MA: No.

5. Q: Do you travel with travel sized toothpaste?

MA: Yes.

6. Q: Would you buy a “bulk sized” toothpaste bottle if it was offered?

MA: No, there would be no room in the bathroom for it.

7. Q: Would you refill a toothpaste bottle if the option was available?

MA: Yes absolutely!

8. Q: Do you recycle your toothpaste bottle?

MA: No, because they're too hard to clean.

9. Q: Would you describe yourself as a “toothpaste tube roller”? Someone who squeezes every last bit from the tube before tossing it?

MA: Yes absolutely!

10. Q: How often do you buy toothpaste?

MA: (Various answers: anywhere from 1-6 months, and a few 'I don't know').

Focus Group

Q&A continued



11. Q: Where does the toothpaste bottle live in your household? Sink, drawer, medicine cabinet, etc.?

MA: The sink.

12. Q: Do you find that your toothpaste lid gets “gunked up”, with toothpaste?

MA: No.

13. Q: Do you leave the lid/cap off of your toothpaste?

MA: No, absolutely not!

14. Q: Do you share your toothpaste with someone else in your household?

Roommate, life partner, parents, etc.?

MA: Yes, (mostly life partners).

15. Q: Where do you squeeze the toothpaste from when holding it? From the bottom, middle, top?

MA: The bottom.

16. Q: What features are most important to you in your toothpaste purchase?

MA: Anti-cavity/cleaning

17. Q: If all the features you look for in toothpaste were offered, would you buy from a brand you’ve never heard of before?

MA: Yes

18. Q: Have you ever used toothpaste tablets? Why or why not? If so, share a few words on your thoughts on them.

MA: No. Didn’t know they existed or if/how they work.

19. Q: Have you ever avoided a product because of its packaging? Give examples.

MA: Yes, if it has too much plastic.

20. Q: What products do you buy despite the packaging? Why?

MA: Plastic shampoo bottles with pumps. (Many said they would prefer to use glass refillable ones if it felt safe to use in the shower)

Insights

- Brand is important to choosing toothpaste
- Refillable toothpaste is much desired
- Reducing overall plastic use in toiletries is much desired
- Toothpaste is not generally recycled due to its difficulty in cleaning the bottle
- Toothpaste alternatives such as tablets are not widely known
- Interesting that Arm & Hammer has such great online reviews, but has such a small market share
- Consumers seem to really love Sensodyne



Materials, Process, Waste & Energy

Structure Survey

	Plastic Wrap	Cardboard Box	Plastic Tube	Plastic Lid
Crest	n/a for the particular one I purchased	Recyclable	Recyclable (HDPE 2) if accepted by local recycling facilities	Not recyclable/ not specified
Colgate	n/a for the particular one I purchased	Recyclable	Recyclable (HDPE 2) if accepted by local recycling facilities	Yes, specifies to recycle with cap on
Sensodyne	n/a for the particular one I purchased	Recyclable	Recyclable (HDPE 2) if accepted by local recycling facilities	Recyclable if accepted by local recycling facilities
Arm & Hammer	n/a for the particular one I purchased	Recyclable	Not recyclable	Not recyclable/ not specified
Toms	n/a for the particular one I purchased	Recyclable, made with recycled paperboard	Recyclable (HDPE 2) if accepted by local recycling facilities	Not recyclable/ not specified

Product Package Ratio Dimensions

	Package + Product Weight	Product Weight	Packaging Weight	Packaging Dimensions	Packaging Dimensions	Product Dimensions (roughly)	Air Space	Product to Packaging ratio
Crest	5.2 oz	4.3 oz	1.2 oz	7.25" L x 1.5" W x 3.25" H (2 pack)	35.34 cubic inches	3.9 fl oz or 7.03 cubic inches	21.28 cubic inches	39%
Colgate	6.1 oz	5.1 oz	1.0 oz	7.75" L x 1.5" W x 1.75" H	20.34 cubic inches	4 fl oz or 7.2 cubic inches	13.14 cubic inches	35%
Sensodyne	4.1 oz	3.4 oz	0.7 oz	6.75" L x 1.5" W x 1.75" H	17.71 cubic inches	3 fl oz or 5.4 cubic inches	12.31 cubic inches	30%
Arm & Hammer	6.9 oz	6.0 oz	0.9 oz	8.5" L x 1.5" W x 3.25" H (2 pack)	41.43 cubic inches	4.2 fl oz or 7.5 cubic inches	26.43 cubic inches	36%
Toms	5.4 oz	4.5 oz	0.9 oz	6.5" L x 1.5" W x 2.25" H	21.93 cubic inches	3 fl oz or 5.4 cubic inches	16.53 cubic inches	24%

Needs of the User in Toothpaste Packaging



Plastic Wrap: During my research of what is available at the stores, some toothpaste brands sold sets of 2 or 3 tubes. Rather than having multiple tubes inside a single cardboard box, they put each tube inside its own cardboard box, and then wrapped the two or three boxes together within plastic wrap. I can see no good reason for this, as who is buying multiple tubes of toothpaste, but needs them in their own individual cardboard box?



Cardboard Box: For the cardboard box, I think one would first deduce that the purpose is to allow product information to be present for the consumer. It includes information such as “directions”, “drug facts”, and “ingredients”, “warnings”, etc. However, upon opening the box, all this same information is printed on the tube itself. So what is the need of the cardboard box? My best guess is for retail sales. Toothpaste in its tube shape, is difficult to display and merchandise on a store shelf due to the round shape. I believe once the tube is placed into a box, it becomes easier to stack, therefore, more product can be out on the store shelves.



Plastic Tube: Having the product be in a form of a tube makes sense for the consistency of the product. The tube structure allows for the consumer to squeeze every last bit of product from the container, rather than scrapping any additional bits as it becomes empty.



Tube Lid: For the user, it is nice to be able to close up the tube so product does not leak or ooze out. Some of the lids are large and flat which allow for the bottle to stand on its own. Other require a twist off, which can be inconvenient when brushing teeth, as some people may have one hand with the toothbrush already, and would like to remove the cap with the other. Spin/twist off requires two hands.

Needs of the Product in Toothpaste Packaging



Plastic Wrap: During my research of what is available at the stores, some toothpaste brands sold sets of 2 or 3 tubes. Rather than having multiple tubes inside a single cardboard box, they put each tube inside its own cardboard box, and then wrapped the two or three boxes together within plastic wrap. I can see no good reason for this, as who is buying multiple tubes of toothpaste, but needs them in their own individual cardboard box?



Cardboard Box: For product needs, the cardboard box has little use. The only possible use would be to protect the product during transit. To possibly keep the tube from squishing or being punctured, or possibly even for tamper evidence. However, the cardboard box is not very hefty, so it would protect the tube very little in this sense.



Plastic Tube: in terms of the product, this does not need to be dispensed from a tube. However, the nature of it being a thicker liquid, would require some sort of easy dispensing of some form.



Tube Lid: as mentioned above, from a product standpoint, some of the lids allow the product to stand nicely on its own on a shelf or medicine cabinet. The lid is not necessary for dispensing the product, however it does keep it sanitary in a bathroom setting.

Supply Chain



Potential Vendor Partners

A toothpaste tube supplier/maker.

- Do these need to be plastic?

A cap maker.

- Do these need to be plastic?
- Can we ensure it's the same plastic or material as the tube for ease of recycling?

A cardboard supplier/maker.

- Do they only use recycled cardboard?
- What kinds of inks, dyes, glues do they use?

Understanding the capabilities of local recycling centers.

- What will they take?
 - Will they take toothpaste tubes/caps if rinsed?
 - What are their limitations?
-

Vendor Criteria Scoring System

Sustainable Material Sourcing:

Are the toothpaste tubes and caps made from recycled materials?
Can the supplier guarantee the use of recyclable materials?
What efforts are made to reduce the environmental impact of material sourcing?

Material Matching and Recyclability:

Can the cap maker ensure that the material used for caps match that of the tubes for ease of recycling?
Are there alternatives to plastic caps that can be considered?
What steps are taken to ensure the recyclability of both tubes and caps?

Sustainable Packaging Design:

Does the cardboard supplier primarily use recycled cardboard?
What types of inks, dyes, and glues are used in the packaging, and are they environmentally friendly?
Is the packaging design optimized for recycling and minimal environmental impact?

Compatibility with Local Recycling Centers:

What materials do local recycling centers accept?
Will the recycling centers accept the toothpaste tubes and caps if they are rinsed?
Are there limitations or specific requirements set by local recycling centers that need to be met?

Vendor Evaluation Criteria



Material Sourcing Practices:

Percentage of recycled materials used in production
Transparency in material sourcing and supply chain
Commitment to sustainable practices in sourcing materials



Recyclability and Material Matching:

Ability to provide matching materials for tubes and caps.
Efforts to innovate and use alternative recyclable materials.
Certification or documentation verifying recyclability of products.



Packaging Design and Sustainability:

Use of environmentally friendly inks, dyes, and glues.
Optimization of packaging design for minimal environmental impact.
Track record of implementing sustainable packaging solutions.



Compatibility with Local Recycling Infrastructure

Knowledge of local recycling guidelines and regulations
Willingness to adapt packaging to meet recycling center requirements.
Previous experience working with local recycling centers.

Scoring Methodology

Each Criterion will be assigned a weight based on its importance to the overall sustainability goals.

Vendors/suppliers will be evaluated based on their responses to the questions under each criterion, as well as any supporting documentation or certifications they provide. Scores will be tallied to determine the overall suitability of each vendor/supplier.



Ethical Considerations:

Assessment of vendor/supplier's commitment to the environmental sustainability and social responsibility.

Evaluation of past performance and reputation with the industry.

Alignment of vendor/supplier values with the brand's ethics and vision.



Continuous Improvement:

Regular monitoring and evaluation of vendor/supplier performance.

Open communication channels to address any concerns or opportunities for improvement

Collaboration with vendors/suppliers to innovate and further enhance sustainability efforts

Supply Chain Source Map



Crest



Colgate

Solutions



Opportunities For Redesign

- Removal of cardboard box around the tube
- Making the cardboard box more recyclable (no color, glitter, etc)
- Toothpaste tablets
- Brush with toothpaste attachment
- Subscriptions
- Easy to clean tubes
- Refillable bottles
- Refillable device (such as a Soda Stream, Keurig, etc.)
- Image of bottle to know cap type
- Toothpaste powders
- Box shape tubes
- Elimination of any plastic wrap for individually wrapped boxes for sure
- Make the tube with a flat bottom, or a square-ish side to allow for it to be more stackable?
- Offer an product that we know can be recycled- not just dependent on the abilities of the local facilities.
- Cardboard box that holds many tubes (like granola bars)



Solutions Options Table

SOLUTIONS OPTIONS TABLE

	Does it Stack?	Does it still have product information?	Does it have some sort of Tamper Evidence?	YES SCORE:
Removal of unnecessary packaging (plastic wrap and cardboard box) around the tube	YES/NO	YES/NO	YES/NO	0/3
	Does it have unnecessary glues/dyes/glitter?	Will all recycling facilities take it?	All parts (such as the cap) of the same material?	
Make the Packaging More Recyclable	YES/NO	YES/NO	YES/NO	0/3
	Can the container safely be reused?	Can the product itself be easily refilled in the package?	Easy to rinse/clean?	
Creating the container for easier reuse	YES/NO	YES/NO	YES/NO	0/3
TOTAL SCORE:				0/9

Cross Product Inspiration for Resdesign

1. Soap/spray cleaner refill bottles: being able to purchase a reusable and sturdy plastic bottle than can be refilled with a bulk bottle when needed.
2. Soda stream dispensers: A machine that can be purchased and refill the cartridge with the bottle/item to be dispensed every month or so when needed. Can send back the old canister when done
3. Laundry Tablets: to reduce the volume in shipping and in packaging, laundry soap is concentrated and just adds water (as water is needed in its use anyway). Could toothpaste been done the same way in a more concentrated form?





Final Recommendation

The toothpaste container is a unique blend of elegance and practicality, crafted from smooth, transparent glass that exudes sophistication. Its rectangular shape is not only visually appealing but also designed for effortless stacking, maximizing space efficiency on bathroom shelves or countertops. The glass material offers a glimpse into the contents within, showcasing the vibrant colors of the toothpaste encased within its walls. At the base of the container, a sleek aluminum plunger mechanism awaits, ready to dispense the toothpaste with precision and ease. With a gentle press, the plunger gracefully pushes the toothpaste upward, ensuring every last bit is effortlessly extracted from the container. This innovative design not only adds a touch of luxury to the daily oral care routine but also promotes sustainability by offering a reusable alternative to traditional plastic tubes. Additionally, the glass container is easy to rinse and clean, maintaining hygiene effortlessly, and the aluminum plunger can also be easily separated from the glass. Furthermore, the glass and aluminum are commonly accepted by recycling facilities, contributing to environmental conservation efforts. As a statement piece in any bathroom, the glass toothpaste container combines style, functionality, and eco-consciousness, reflecting a commitment to both oral health and environmental stewardship.

Sources

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