

ing high concentration in-office products or low concentration at-home products. At-home products can be obtained either (See CRA Newsletter reports on in-office bleaching with & without light & OTC at-home Crest Whitestrips, respectively). The facte in amount of active ingredient, contact times, application methods, additives, & marketing strategies. Clinicians & patients larities & subtle differences among 23 popular at-home tooth bleaching products. (See footnotes below for rating definitions.)

Brand & Company (listed alphabetically)	A. Cost to dentist: per ml * per kit *	B. Tooth Color Change †	C. Decrease in Active Ingredient During Use ‡	D. Directions Grade ††	E. Viscosity Grade ††	F. Taste Grade ††	G. User Satisfaction Survey ††	H. Total Contact Time	I. CRA Measured pH	J. Other Concentrations Sold by Co.	K. Kit Accessories	L. OVERALL SCORE †††
Carbamide Peroxide (CP) 15% & 16% - Active Ingredient												
13. CONTRAST PM Spectrum Dental Inc. Phone: (310) 845-3160 Fax: (310) 845-1512	\$1.83/ml \$24.00/kit	Using Vitapan 3D-Master Shade Guide		4	4	2.3	4.0	80 hrs.	6.1	10% CP 20% CP	tray case	3.5
14. DENTA-LITE Challenge Products Phone: (303) 673-0341 xt:3915 Fax: (303) 673-0346	83¢/ml \$50.40/kit			3	2.5	1.6	4.0	42 hrs.	5.5	10% CP 16% CP 22% CP†	travel case	2.9
15. FX TOOTH WHITENING GEL SL Dental Products Phone: (504) 885-3184 Fax: (504) 885-7215	\$1.74/ml \$35.00/kit			4	2	1.8	2.5	84 hrs.	5.1	10% CP	travel case	2.7
16. KARISMA Confli-Dental Products Phone: (303) 665-7595 Fax: (303) 666-4320	\$1.21/ml \$40.60/kit			3	2	2.8	2.5	56 hrs.	5.2	10% CP	tray case wash block-out material	2.7
17. NITE WHITE EXCEL 2Z Discus Dental Phone: (310) 845-8200 Fax: (310) 845-1537	\$1.94/ml \$42.50/kit			4	4	2.8	2.5	168 hrs.	6.3	10% CP 22% CP	travel case shade guide	3.0
18. NUPRO GOLD Dentsply Professional Phone: (717) 767-8524 Fax: (717) 767-8252	\$1.82/ml \$54.60/kit			4	4	3.2	4.0	112 hrs.	5.7	10% CP	tray case shade guide	3.3
19. OPALESCE PF Ultradent Products Phone: (801) 572-4200 Fax: (801) 572-0600	\$1.99/ml \$39.75/kit			4	4	2.4	3.0	56 hrs.	6.3	10% CP 20% CP	tray case toothpaste shade guide wash block-out material	3.4
20. REMBRANDT GEL PLUS Den-Mat Phone: (805) 922-8491 Fax: (805) 922-6933	\$1.25/ml \$25.00/kit			4	1	3.3	2.5	84 hrs.	5.8	21% CP	tray case shade guide toothpaste breath drops	2.7
21. REMBRANDT X-COMFORT Den-Mat Phone: (805) 922-8491 Fax: (805) 922-6933	\$1.25/ml \$25.00/kit			4	2.5	2.6	4.0	112 hrs.	5.8	12% CP 21% CP	tray case shade guide toothpaste breath drops	3.2
22. WHITE & BRITE Ornii Products Phone: (561) 689-1140 Fax: (561) 689-1159	\$1.86/ml \$45.00/kit			4	4	3.0	4.0	36 hrs.	5.2	10% CP 22% CP	tray case shade guide	3.7
23. ZARIS 3M Dental Phone: (651) 575-5144 Fax: (651) 733-2481	\$3.54/ml \$52.08/kit			4	4	2.0	2.6	56 hrs.	6.0	10% CP	travel case	3.0

* Cost per ml based on retail list cost of refill kits.
Cost per kit based on most sold kit according to company.

‡ % of total bleaching agent available after adjusting for tooth size & interproximal spaces for each test subject. All 23 products were tested using vacuum formed trays without reservoirs because this method provided best standardization.

▲ Manufacturer claims formulation has changed.

† Color change measured using Vitapan 3D-Master Shade Guide 1 week after treatment completed.

‡ KEY: 4= Excellent; 3= Good; 2= Fair; 1= Poor.

Average based on columns A, B, C, D, E, F, G, H.

✘ Manufacturer claims product no longer on market.

shades using company's recommended regimen. Differences are summarized below:

- E. **VISCOSITY** of all HP & 6 of 7 10% CP products was high. High viscosity gels stayed on teeth & retained more active ingredient over time. 15% CP products varied in viscosity by brand with Rembrandt Gel Plus showing lowest viscosity & most rapid decrease in active ingredient during use. However, it gave comparable lightening due to its longer use period.
- F. **TASTE** rated in blind tests showed no products rated excellent, five rated good, fifteen fair, & three poor. Crest Whitestrips, Rembrandt Gel Plus, & Nupro Gold received highest grades.
- G. **USER SATISFACTION** surveys showed 100% satisfaction for 9 products: Crest Whitestrips, Contrast PM, Day White 2Z, Denta-Lite, Nite White Excel, Nupro Gold, Rembrandt X-Comfort 16%, White & Brite, & VivaStyle.
- H. **TOTAL CONTACT TIME** varied substantially (10-168 hours). Bleaches with active ingredients of 3.0 to 7.5% HP recommended shortest treatment times (≤ 21 hours) & gave desired results. Colgate Platinum Overnight recommended shortest contact time for overnight treatment (30 hours).