In the last few years, stannous fluoride has re-emerged on store shelves, most notably in Crest® Pro-Health® dentifrice. Although stannous fluoride has been used in oral care products for decades, contemporary stannous fluoride dentifrice is much different from formulations available to previous generations. Below is a brief Q&A about stannous fluoride and Crest Pro-Health dentifrice to help you as you educate patients on fluoride products for home care...some things might surprise you!

Q. IS STANNOUS FLUORIDE DIFFERENT FROM OTHER TYPES OF FLUORIDE?
A. Yes. Unlike other popular fluorides, stannous fluoride provides many benefits beyond caries protection. Stannous fluoride is also effective against dentinal hypersensitivity, plaque, gingivitis, and breath odor.

Details: In the US, three types of fluorides are used in dentifrice to help prevent caries: sodium fluoride, sodium monofluorophosphate and stannous fluoride. All three fluorides help prevent caries by remineralizing tooth enamel and protecting against demineralization. Stannous fluoride, however, provides other benefits due to its unique mechanisms of action.

First, stannous fluoride blocks dentinal tubules to rapidly treat and protect against tooth sensitivity, Second, stannous fluoride is an antibacterial agent. It kills and inhibits a broad range of bacteria, including those species associated with dental caries, gingivitis, and oral malodor.

Q. HOW IS CREST PRO-HEALTH DIFFERENT FROM ORIGINAL CREST WITH STANNOUS FLUORIDE LAUNCHED IN THE 1950’S?
A. Crest Pro-Health contains stabilized stannous fluoride, which is more effective than the Crest toothpaste first marketed in the 1950’s that also contained stannous fluoride. It also contains sodium hexametaphosphate — an anticalculus and whitening ingredient — so it provides cosmetic as well as therapeutic benefits.

Details: Original Crest with stannous fluoride was the first dentifrice to receive the American Dental Association (ADA) anti-caries Seal of Acceptance in 1960. However, this early stannous fluoride dentifrice had a short shelf life and stability challenges. As such, it provided an anticaries benefit, but did not have sufficient bioavailable stannous fluoride to provide clinically meaningful plaque/gingivitis benefits. In the early 1980’s, the formulation was changed to sodium fluoride, which was more stable and offered even better caries prevention than the original formula.

Due to the numerous benefits provided by stannous fluoride, researchers continued to work towards an improved stannous fluoride formulation. In 2005, after years of extensive research, Crest Pro-Health was introduced. The current formulation incorporates stabilized stannous fluoride, which means more active is bioavailable, and a cosmetic ingredient, sodium hexametaphosphate, which provides anticalculus and whitening benefits.

Q. DOES STANNOUS FLUORIDE STAIN?
A. Stannous fluoride, as an ingredient, has the potential to form minor surface stain in some people. However, unlike other stannous fluoride products, the patented Crest Pro-Health formula contains an extrinsic whitening agent, sodium hexametaphosphate, In fact, Crest Pro-Health has the ADA Seal of Acceptance for Whitening.

Details: Sodium hexametaphosphate has been shown to be an effective extrinsic stain remover that works via its ability to remove stains in the pellicle and prevent incorporation of new chromogens. While stannous fluoride can predispose staining if not formulated with an anti-staining agent, numerous studies have shown that sodium hexametaphosphate counters that effect. In fact, in multiple clinical trials, Crest Pro-Health provided whitening benefits as effective as a positive control, ADA-Accepted whitening toothpaste. After a prophylaxis in one study, participants assigned to Crest Pro-Health did not develop extrinsic stain over a six-month period. In four other shorter-term stain removal studies, the Crest Pro-Health group didn’t differ significantly from the positive control whitening toothpaste, with both dentifrices significantly removing surface stain.

Q. IS THERE CLINICAL DATA SUPPORTING CREST PRO-HEALTH?
A. Yes, numerous clinical studies have been published on Crest Pro-Health and the stannous fluoride with sodium hexametaphosphate dentifrice technology.
Based on data from the extensive research program, Crest Pro-Health received the ADA Seal of Acceptance for protecting against all these areas: cavities, gingivitis, plaque, sensitivity, stains and bad breath.

Details: The clinical program for the development of Crest Pro-Health included numerous published clinical studies to support the effectiveness of stannous fluoride-sodium hexametaphosphate dentifrice against all key benefit areas: caries, plaque, gingivitis, dentinal hypersensitivity, breath odor, calculus, and extrinsic whitening. Research involved negative and positive controls, numerous clinical sites and multiple investigators. More details on these studies are available at dentalcare.com.

Q. WILL MY PATIENTS LIKE IT?
A. Patient based research and in-market data shows an extremely positive response to Crest Pro-Health.

Details: The most effective product is of no value if it’s not used. To that end, a practice-based assessment of Crest Pro-Health was conducted with patients and their dental professionals for up to six months, using before-and-after provider surveys and patient questionnaires.

Over 1000 patients responded. A total of 88% rated Crest Pro-Health Excellent/Very Good/Good, and 77% of those with noticeable improvement in their oral health indicated they’d keep using it. Benefits like “making gums healthier”, “cleaning teeth thoroughly”, “freshening breath”, and “keeping mouth healthy” were identified by about 9 in 10 patients, and 83% stated it reduced stains, while 77% believed it diminished gingival bleeding.

Analysis of the 1,267 returned surveys by dentists and hygienists also showed very favorable responses: 80% of professionals said they’d recommend the stannous fluoride/sodium hexametaphosphate dentifrice. This increased to 91% of those observing improvements in their patients’ oral status.

So the next time a patient asks if all fluoride toothpastes are the same, consider the unique qualities of modern stannous fluoride dentifrice. While stannous fluoride has a long legacy of use in oral care products, today’s innovations offer much more than their predecessors. Most patients experience more than one oral health condition, so daily use of a fluoride dentifrice that provides broad protection would be advantageous. For more information, go to dentalcare.com.