

Rutgers University human clinical study finds SunCran Naturelle has superior bacterial anti-adhesion benefits

This all-natural, premium branded formula is more impactful than previously studied ingredient combinations for managing urinary tract health

Formulators around the globe have already shown interest in SunCran Naturelle, an all-natural carrier free premium branded formula that blends two superior ingredients to support gut and urinary tract health. Now results of a newly completed Rutgers University study may further boost that interest. The study found that SunCran Naturelle, standardized to soluble proanthocyanidins (PACs), may be the best choice for limiting the ability of pathogenic bacteria to adhere to the urinary tract. Taiyo International will feature SunCran Naturelle samples at booth #S3820, and Fruit d'Or will feature it at booth #N6219, during this year's IFT18 in Chicago.

SunCran Naturelle combines Taiyo's Sunfiber soluble guar fiber with Fruit d'Or's Cran Naturelle cranberry juice powder. It is a turnkey solution for those looking for prebiotic fiber benefits combined with cranberry juice benefits, without the added sugar. Available as a bulk powder, SunCran Naturelle is suitable for functional ready-to-drink beverages as well as for bars, capsules, stick packs and scoopable powders. It is organic, GRAS, Non-GMO Project Certified, gluten-free and low-FODMAP certified.

Evidence that Sunfiber is a key to more effective urinary health support

Similar studies have been done with other ingredients in combination with Cran Naturelle cranberry juice powder, but the Sunfiber/Cran Naturelle formula (as SunCran Naturelle) elicited the most promising results.

In this recent one-day study, 20 healthy adults (10 men/10 women) underwent a three-day washout period during which they were restricted from consuming high-flavonoid products. On the morning of the study, they received a 945 mg dose of SunCran Naturelle. Their urine was then collected at regular intervals throughout the day. Their fluid consumption was standardized to avoid dilution of urine samples and allow for detection of anti-adhesion activity, if present. Each participants' urinary pH was confirmed to be above 5.5, to rule out pH as a potential inhibitor of bacterial growth.

The urine samples were then exposed to a suspension of pathogenic E. coli. The results showed:

- No anti-adhesion activity was detected in the urine prior to SunCran Naturelle consumption
- Overall, 85% of participants showed at least a moderate anti-adhesion response after SunCran Naturelle consumption.
- There were no significant gender differences in the responses.

“We are pleased with these results that show very robust anti-adhesion effects,” comments Taiyo Technical Sales Director Derek Timm, PhD, RDN, who also points out that a previous human clinical study showed Sunfiber plus antibiotics was superior to antibiotics alone in modulating pathogenic bacteria in the gut.

Added Fruit d’Or Global Sales and Marketing Consultant Stephen Lukawski, “The purpose of this study was to see if we could achieve anti-adhesion activity using SunCran Naturelle. The good news is we do not have to use maltodextrin or magnesium hydroxide. We can now deliver a cranberry juice powder that is green and clean and consumer friendly.”

Significance for formulators

“With this research, we are providing holistic solutions targeting both urinary tract and gut health. SunCran Naturelle contains standardized, soluble cranberry PACs, which have been shown to have an anti-adhesion affect against pathogenic bacteria that lead to urinary tract issues. We’ve combined this best-in-class cranberry with a true prebiotic fiber proven to improve gut health and minimize harmful bacteria before they find their way to the urinary tract.”

Timm continued, “Several significant national and international companies have already taken notice of this product. We’ll be excited to share updates in the coming months.”

Best-in-class ingredients = best-in-class claims

SunCran harnesses the science behind two ingredients with well-documented, scientifically validated benefits:

- **Sunfiber:** Taiyo’s FDA-approved soluble dietary fiber, Sunfiber (sourced from the guar bean) has strong prebiotic characteristics that stimulate health-promoting indigenous gut bacteria such as *Lactobacilli* and *Bifidobacteria*, and minimize harmful bacteria. Tasteless, odorless and colorless, Sunfiber has been shown in more than 120 clinical studies to support digestive health without the uncomfortable side effects.
- **Fruit d’Or Cranberry Juice Powder:** Fruit d’Or’s standardized cranberry juice powder is the first maltodextrin-free powder made with fresh cranberry juice to support a healthy urinary tract. Previous research by Rutgers University has shown that cranberry PACs may inhibit pathogenic *E. coli*’s ability to adhere to epithelial cells in the urinary tract. Additionally, work conducted by Complete Phytochemical Solutions, captured electron microscopic images of the PACs bound to pathogenic *E. coli* that showed how the anti-adhesion works.

Timm comments, “Taiyo and Fruit d’Or have gone to extraordinary efforts to ensure traceability and purity, as well as, to demonstrate the health benefits of our ingredients. By developing SunCran Naturelle, our goal is to provide formulators – and ultimately the public – with safe, trusted and effective product that truly delivers on claims.”