Evaluation of the prebiotic effect of Sanex Atopiderm body wash with Triple-biotics technology

Submitted by:

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Abstract

Pre/postbiotics are well known to have beneficial effects on skin microbiome. We have developed a proprietary microbiome technology for Sanex pre/postbiotics new line. The triple-biotic technology consists of 3 key actives: inulin, Butyloctanol and biomimic postbiotics. The purpose of this study is to evaluate the prebiotic effect of Sanex Apiderm body wash formula with triple-biotics technology. The in vitro test showed Sanex Apiderm body wash with triple-biotics technology promoted the growth of desirable bacteria (*Staphylococcus epidermidis)* compared to the placebo.

Materials and Methods

OBJECTIVE

To evaluate the prebiotic effect of Sanex body wash formula with triple-biotics technology.

STUDY DESIGN

Growth inhibition assay was performed to determine whether the full formula inhibits or promotes the growth of skin bacteria.

TEST PRODUCTS

List product by technology with PIM Numbers (if available)

Full formula:

Sample: Sanex Apiderm body wash with triple-biotics technology PDM # 100000191803/001/000
Placebo: Sanex body wash Placebo, PDM # 100000194944/000/000
Benchmark: LoRche Posay body wash , PDM# 3*4912

Bacteria under study:
Staphylococcus epidermidis (ATCC 12228) from VWR
Staphylococcus aureus (ATCC 6538) from VWR

PROCEDURE (cite SOP if available)

The body wash samples were diluted to 1% solution in TSB medium. A pure colony of *S. aureus* and *S. epidermidis* were grown in TSB medium overnight. The turbidity of the bacterial culture solution was adjusted to 0.1OD (Optical Density) at 610 nm using a UV-VIS Spectrometer. Then 2ml of the bacteria culture solution was incubated with 2ml of 1% body wash solution at 37◦C for 3h. After 3h incubation, the mixed solution was 10 times series diluted in TSB. 100 ul of bacteria solution was plated on TSA plates, and incubated at 37◦C overnight. The bacteria colonies on the plated were counted next day. At least two separate experiments were run for each tested samples, and each experiment has 3 replicates. The data was expressed as log10 colony-forming unit (CFU)/ml. The ratio of desirable bacteria to undesirable bacteria was calculated by dividing the log counts of undesirable bacteria by the log counts of desirable bacteria. The statistical significance between treatments was analyzed by ANOVA at 95% confidence level in Minitab software

RESULTS

Sanex Apiderm body wash with triple-biotics technology significantly increased the growth of desirable bacteria (*S. epidermidis*) (Fig 1) compared to the placebo, did not change the growth of S. aureus and the ratio of S. epidermidis to S. aureus compared to placebo and benchmark.

Tables & Figures

Fig 1, Sanex body wash with triple biotics technology promoted the growth of desirable bacteria (*S. epidermidis)* compared to placebo.

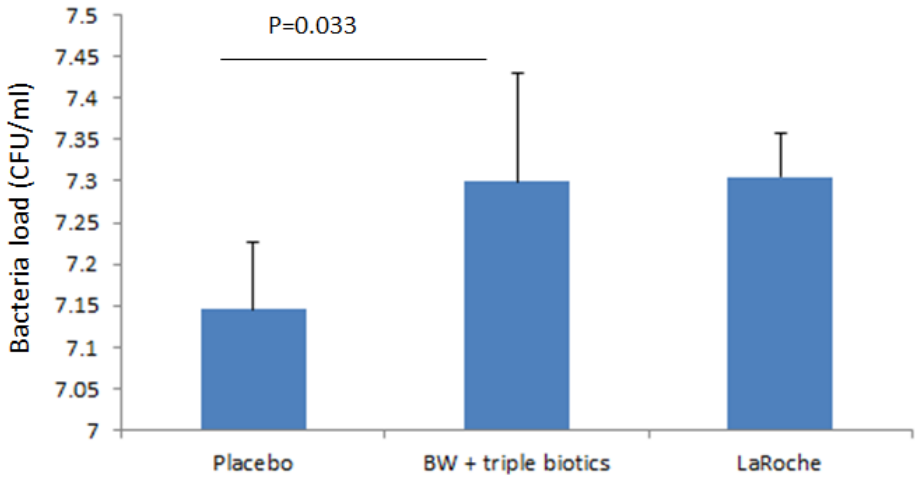

Fig 2, Sanex body wash with triple biotics technology did not change the growth of S. aureus compared to placebo and benchmark.

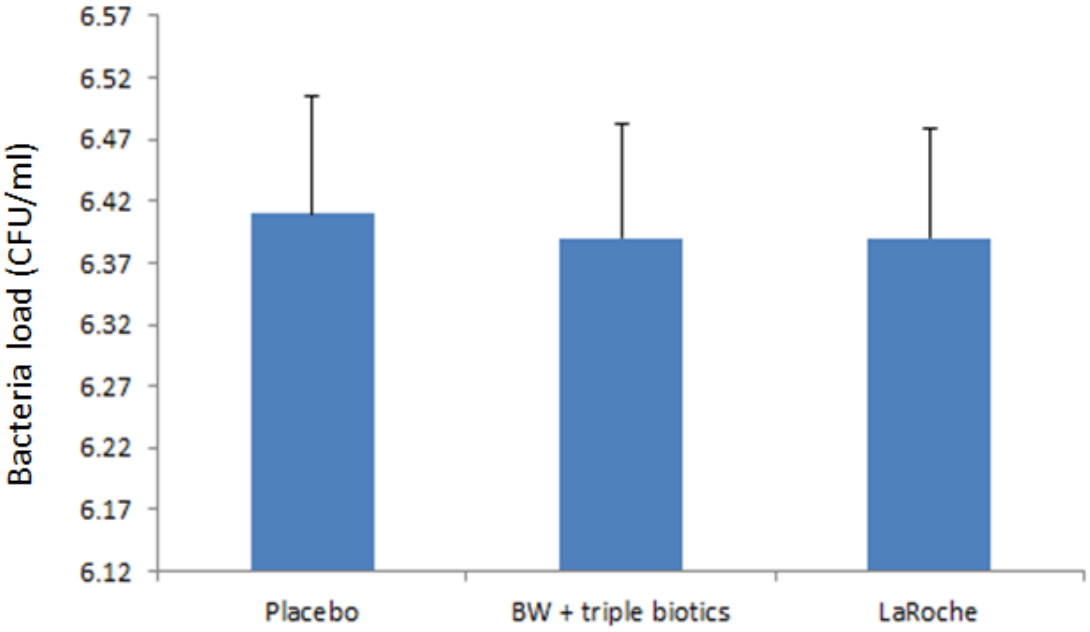

Fig 3. Sanex Apiderm body wash did not change the ratio of S. epidermidis to undesirable bacteria (*S. aureus*) compared to placebo.
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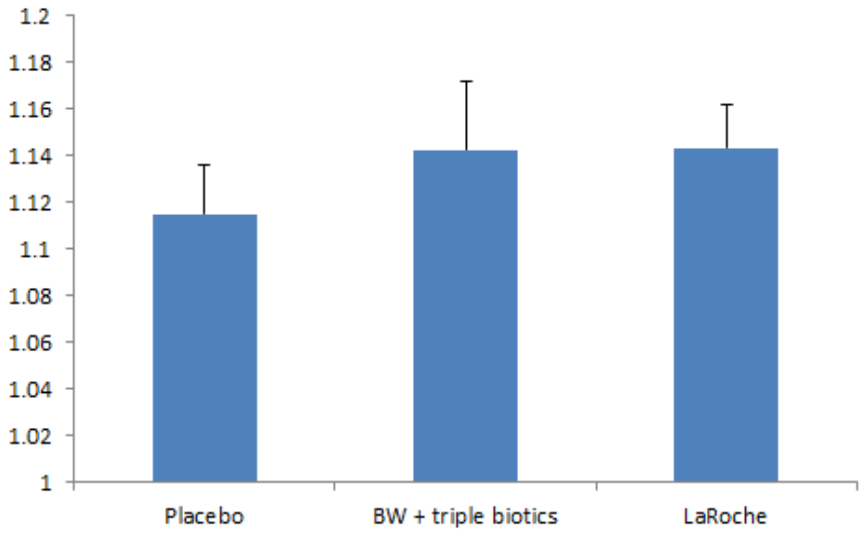

III. List search results and any other relevant references (including patents and related CP invention

Discussion/Summary and Conclusions

Sanex body wash with triple-biotics technology showed prebiotic effect compared to placebo. It promotes desirable bacteria growth, did not reduce undesirable bacteria compared to placebo.

References: