

REPORT

CONSUMER STUDY - ellen® Probiotic Intimate Crème

Background

Dryness, irritation and bad odour are common problems in the intimate area of women. Caused by different reasons, these uncomfortable feelings can be temporary or recurrent. Many women experience that their self-confidence, lust and wellbeing are affected due to problems in their intimate area.

Based on natural substances of vegetable origin and probiotic bacteria (lactobacilli) belonging to women's own beneficial bacterial flora, Ellen AB has developed a new modern intimate care product, the Probiotic Intimate Crème. ellen® Probiotic Intimate Crème is classed as a cosmetic product. The main ingredients of the crème are a vegetable fat and oil, as well as a blend of freeze dried probiotic lactic acid bacteria of the strains *L. gasseri* LN40, *L. fermentum* LN99 and *L. rhamnosus* LN113. The level of the lactobacilli in the crème is 10⁸ CFU/g. The crème is totally water-free.

The Probiotic Intimate Crème softens the skin and the fragile external mucus membranes, prevents dryness, and helps to maintain the moisture in the external intimate area. Due to its probiotic lactic acid bacteria content, the Probiotic Intimate Crème also helps to maintain the natural microbial flora in the external intimate area, acts like a protective barrier and gives a fresh feeling in this intimate part of the body. The crème can be used by women in all ages.

To be able to understand the prevalence of discomforts as dryness, itching/irritation, bad odour and not feeling fresh in the intimate area, as well as the prevalence of urinary urgency and problem with sex-life problem due to the intimate area discomforts, a consumer study was carried out. In the study we also evaluated the women's subjective experience of improvement of these problems after 10 days usage of the ellen® Probiotic Intimate Crème.

Material and method

The test product

The test product was ellen® Probiotic Intimate Crème filled in aluminium tubes, each packed in a paper box. One aluminium tube contained 15 ml crème.

Study design and outline

The study was an open consumer study and was conducted in compliance with ethical principles of the latest revision of the Declaration of Helsinki and the data protection law of individuals (SFS 1998:204).

Women of the age 28 years and older were recruited to the study by advertisement in a newsletter directed to members of a women's network. The women were asked to test the Probiotic Intimate Crème for 10 days, twice daily in the external intimate area (a pea size amount of crème at each application on the outer mucous membranes, around the opening of the vagina but not in the vagina).

The women were asked that before starting the test answer a questionnaire regarding to their behaviors of intimate shaving and usage of intimate care products. They were also asked to rate their subjective experience of dryness, itching/irritation, bad odour and not being fresh in the intimate area, as well as their experience of urinary urgency and problem with sex-life due to intimate area discomforts. They were asked to also rate their improvements of these problems after the crème usage period (alternative answers). The women were also asked to rate the cosmetic properties of the product (texture and smell) and the pleasantness of the feeling after application. They were also asked to give their opinion about the probability that they in the future would use (buy) and recommend the product to a friend.

The answers in the questionnaire were alternative answers according to the table below (Table 1).

The women were asked to send the filled questionnaire by post to Ellen AB.

Table 1. Alternative answers in the in the questionnaire regarding to different behaviors and problems before and after using the ellen® Probiotic Intimate Crème.

Questions regarding:	Alternative answers	
	Before using ellen® Probiotic Intimate Crème	After using ellen® Probiotic Intimate Crème
Behaviors of intimate care product usage	Never	-
Behaviors of intimate shaving	Sometimes Usually Always	-
Problem with dryness in the intimate area	Not at all A little Much Very much	Much worse Little worse No difference Little better Much better
Problem with no being fresh the intimate area		
Problem with bad odour in the intimate area		
Problem with itching/irritation in the intimate area		
Problem with urinary urgency		
Problem with sex-life due to intimate area discomforts		
Properties of the product (texture, smell, feeling after application)	-	Very unpleasant Little unpleasant Quite pleasant Very pleasant
The probability that the women in the future would use (buy) the crème	-	Yes / No
Recommend the crème product to a friend	-	Yes / No

Results

During the period July - September 2013, 92 women between the age 28 and 76 years (median age = 60 years) sent their filled questionnaire to Ellen AB after that they had used the Probiotic Intimate Crème for 10 days.

Base line (before use of the intimate crème)

88% of the women had problem (a little, much or very much) with dryness in their intimate area. 40% rated their problem with dryness as much or very much.

78% of the women had a little, much or very much problem with not being fresh in the intimate area, 54% had problem with bad odour, 76% with itching and irritation, 43% with urinary urgency, and 74% with sex-life due to intimate area discomforts. See also Table 2 and Figure 1.

Regarding to general behaviors, 68% of the women used intimate care products and 35% shaved all or part of their intimate area (sometimes, usually or always).

Figure 1: Prevalence of discomforts in the intimate area of women (% women)

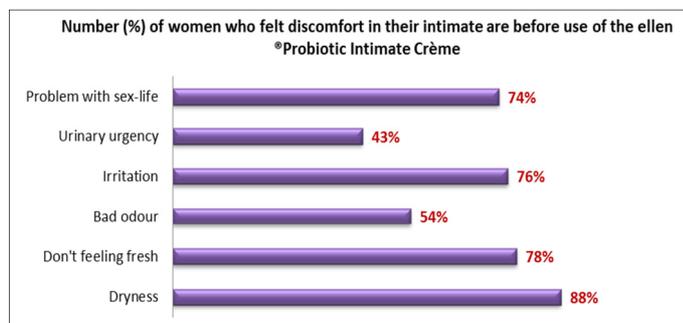


Table 2. Prevalence of discomforts in the intimate area of women (% women)

Discomfort	% women
Dryness	88%
Not being fresh	78%
Bad odour	54%
Itching and irritation	76%
Urinary urgency	43%
Problem with sex-life	74%

After use of the intimate crème

All women

After using the Probiotic Intimate Crème for 10 days, 88% of the women felt an improvement in problems with dryness in their intimate area, 66% had an improvement in the feeling of freshness, 46% had an improvement in bad odour, 61% an improvement in itching and irritation and 33% experienced an improvement in urinary urgency. These improvements were rated as little better or much better. 59% of the women had or thought they would have an improvement (little better or much better) in their sex-life by using the Probiotic Intimate Crème. See also Table 3 and Figure 2.

93% of the women liked the crème and thought it had a pleasant or very pleasant texture, 89% thought it had a pleasant or very pleasant smell, and 92% thought that the feeling in their intimate area after application of the crème was pleasant or very pleasant. 93% of the women would buy the Probiotic Intimate Crème and 93% recommend it to a friend.

Table 3. Improvement of discomforts in the intimate area of women (all) after 10 days usage (twice daily) of ellen® Probiotic Intimate Crème.

Discomfort	% women who felt improvement (felt little better or much better)
Dryness	88%
Not being fresh	66%
Bad odour	46%
Itching and irritation	61%
Urinary urgency	33%
Problem with sex-life	59%

Sub-groups of women

Women who felt dryness in their intimate area before using the Probiotic Intimate Crème: 94% of the women felt better or much better regarding the feeling of dryness after 10 days crème usage.

Women who didn't feel fresh in their intimate area before using the Probiotic Intimate Crème: 79% of the women felt better or much better regarding their feeling of freshness after 10 days crème usage.

Women who had problem with bad odour in their intimate area before using the Probiotic Intimate Crème: 76% of the women felt better or much better regarding the feeling of bad odour after 10 days crème usage.

Women who had problems with itching/irritation in their intimate area before using the Probiotic Intimate Crème: 73% of the women felt better or much better regarding itching/irritation after 10 days crème usage.

Women who had problems with urinary urgency before using the Probiotic Intimate Crème: 55% of the women felt better or much better regarding urinary urgency after 10 days usage.

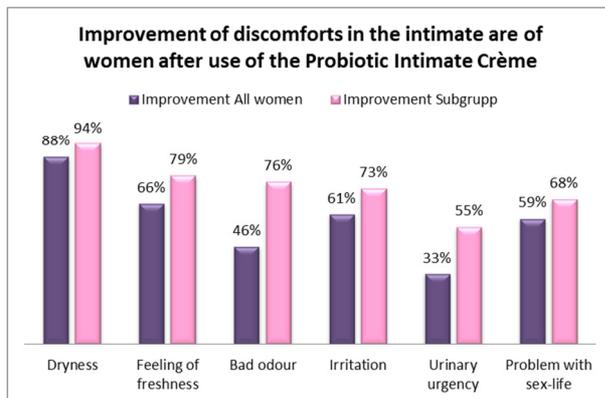
Women who had problems with sex-life before using the Probiotic Intimate Crème: 68% of the women had or thought they would have little better or much better better improvement in sex-life by using the crème for 10 days.

See also Table 4 and Figure 2.

Table 4. Improvement of discomforts in the intimate area of sub-groups of women after 10 days usage (twice daily) of ellen® Probiotic Intimate Crème.

Sub-group of women	Discomfort	% women who felt improvement (felt better or much better)
1 who felt dryness in their intimate area before using the Probiotic Intimate Crème	Dryness	94%
2 who didn't feel fresh in their intimate area before using the Probiotic Intimate Crème	Not being fresh	79%
3 who had problems with bad odour in their intimate area before using the Probiotic Intimate Crème	Bad odour	76%
4 who had problems with itching and irritation intimate area before using the Probiotic Intimate Crème	Itching and irritation	73%
5 who had problems with urinary urgency before using the Probiotic Intimate Crème	Urinary urgency	55%
6 who had problems with sex-life before using the Probiotic Intimate Crème	Problem with sex-life	68%

Figure 2. Improvement of discomforts in the intimate area of women after using the Probiotic Intimate Crème (In all women and in sub-groups).



Discussion/Conclusion

According to this study, the majority (88%) of the women, 28 years old or older, suffer from dryness in their intimate area. Near half (40%) of these women have much or very much problem with this discomfort. Itching and irritation, as well as not feeling fresh in the intimate area seem to be the other huge problems in this group of women (78% and 76%, respectively). Moreover, the majority (74%) of women have problems in sex-life due to their problems in the intimate area. Bad odour and urinary urgency affect half or almost half of the women in this age group (54% and 43%, respectively).

This study showed that in the majority of all women the ellen® Probiotic Intimate Crème is effective against dryness, itching/irritation and not feeling fresh in the intimate area, independently the base line problems of the women (88%, 61% and 66%, respectively). Almost half of all women (46%) also felt an improvement in their intimate area regarding bad odour, and just over half of all women (59%) felt that the Probiotic Intimate Crème influenced their sex-life positively. The improvement in urinary urgency was less in all women (33%) compared to other discomfort improvements.

The improvements were more visible when sub-groups of women were analyzed. As much as 94% of the women who usually felt dryness in the intimate area felt less dryness after using ellen® Probiotic Intimate Crème. Also problems as bad odour and urinary urgency were noticeably improved in women who from the beginning suffered just from bad odour and urinary urgency (improvement of 76% in sub-group compared to 46% in all women, and improvement of 55% in sub-group compared to 33% in all women). The feeling of freshness, irritation/itching and problem with sex-life were also improved in greater extent in the sub-groups suffering from the specific discomforts (improvement of 79%, 73% and 68% in the sub-groups compared to 66%, 61% and 59% in all women, respectively).

The cosmetic properties of the crème (texture, smell and feeling after application) were pleasant for almost all women (93%, 89% and 92 %, respectively), and the majority (93%) of them would buy and recommend the crème to a friend.

Based on this study we can state that the ellen® Probiotic Intimate Crème is suitable for alleviation of the above mentioned problems, especially of the dryness.

Due to its all-around effect against common urogenital discomforts, the ellen® Probiotic Intimate Crème is a natural alternative for women's daily intimate body care.