

WASHES, DOUCHES, AND WIPES, OH MY!

The troubling trend of repackaging feminine hygiene products for the next generation

Feminine hygiene products are associated with recurrent vaginitis, bacterial vaginosis, and general irritation and itch. Product marketing targeted to adolescents is a health concern.

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Feminine hygiene products have been commercially available for decades. They are commonly marketed to reduce odor or clean vaginal discharge and menses. Multiple formulas are available as topical washes, wipes, creams, sprays, powders, deodorants, and douches.¹ Products on the market range from those used externally on the vulva, such as wipes and sprays, to liquid solutions used intravaginally, such as washes and douches.



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Who uses feminine hygiene products?

According to a 2006 study, the majority of women who use douches started using them between age 15 and 19 years, but some women initiate this practice habit as early as age 10 to 14.¹ Predictably, women who douche are more likely to perceive douche products as safe.¹

Demographic data on douche utilization are mixed: Some studies show that there are no significant racial differences in douching practices,² while others have found that Black and African American women are more likely to practice douching than White and Hispanic women.^{1,3} Studies have shown a significant difference in attitudes toward douching and knowledge of normal vaginal symptoms among US racial demographics, although this must be examined through the historical context of racism and the lens of medical anthropology.⁴

Women cite that common reasons they use feminine hygiene products are to feel clean, to control odor, and to use after menses and intercourse.^{1,2}

Modern marketing approaches

From wipes to soaps to douches, feminine hygiene products often are advertised to promote “funk-free periods”⁵ and “freshness,”

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fostering an environment in which women and men develop unrealistic standards for what is considered normal genital odor and resulting in poor body image.⁶

Recently, Vagisil (Combe Incorporated) marketing efforts faced backlash from the ObGyn community for targeting younger populations with a specific product line for adolescents called OMV! In addition, attention has been drawn to VCF vaginal odor eliminating film (Apothecus Pharmaceutical Corp), small stamp-sized dissolving films that are placed in the vaginal canal in contact with the epithelium. This product has entered the market of feminine hygiene products accompanied by slogans of eliminating “feminine odor” and providing “confidence for women to be intimate.”

Effects of feminine hygiene products on the vaginal microbiome

Frequent use of feminine hygiene products has been associated with recurrent vaginitis,

bacterial vaginosis, and general irritation/itch,^{7,8} which can cause more discharge and odor. Ironically, this may result in women using the product more frequently since they often seek out these products to eliminate odor and discharge.^{1,2}

The pH of the vagina changes during a woman’s lifetime, but in the reproductive years, the normal pH range is typically 3.8 to 4.4.⁹ This range allows for a normal vaginal flora to form with bacteria such as *Lactobacillus* species and *Gardnerella vaginalis*, while feminine hygiene products have a wide range of pH.^{9,10}

Regardless of the formulation, most feminine hygiene products contain ingredients and compositions that potentially are detrimental to the health of the vulva and vagina. Many products contain acidic ingredients, such as citric acid, lactic acid, and dehydroacetic acid, that can alter the vaginal pH and weaken the vaginal barrier by wiping out normal vaginal flora¹⁰ despite being advertised for use on “sensitive areas” (TABLE). Lactic acid also has been found to increase diverse anaerobic bacteria in the vaginal microbiome.¹¹ Some feminine hygiene

TABLE Common feminine hygiene products

Product	Brand	Formulation	Ingredients ^a	Marketing terms
Scentsitive Scents Rosé All Day Wash	Vagisil	Wash	Water, sodium laureth sulfate, lauryl glucoside, cocamidopropyl betaine, glycerin, sodium chloride, PEG-120 methyl glucose dioleate, sodium benzoate, salicylic acid, citric acid , disodium EDTA, polyquaternium-10, lactic acid , panthenol, fragrance	<ul style="list-style-type: none"> • Hypoallergenic • pH balanced • Dermatologist and gynecologist tested • Freshness • Gentle
Spring Lilac Mini Wipes	Vagisil	Wipes	Water, PEG-40 hydrogenated castor oil, glycerin, gluconolactone, PEG-7 glyceryl cocoate, aloe barbadensis leaf extract, sodium benzoate, lactic acid , calcium gluconate, fragrance	<ul style="list-style-type: none"> • Hypoallergenic • pH balanced • Freshness
OMV! All-Day Fresh Wash	OMV! by Vagisil	Wash	Water, sodium laureth sulfate, lauryl glucoside, cocamidopropyl betaine, glycerin, sodium chloride, aloe barbadensis leaf extract, anthemis nobilis flower extract, PEG-120 methyl glucose dioleate, sodium benzoate, fragrance, salicylic acid, citric acid , disodium EDTA, polyquaternium-10, lactic acid , tocopheryl acetate	<ul style="list-style-type: none"> • Safe • Gentle • Fresh • Gynecologist tested
OMV! No-Sweat Wipettes	OMV! by Vagisil	Wipettes	Water, PEG-40 hydrogenated castor oil, glycerin, aloe barbadensis leaf extract, anthemis nobilis flower extract, gluconolactone, PEG-7 glyceryl cocoate, sodium benzoate, fragrance, lactic acid , calcium gluconate, tocopheryl acetate	<ul style="list-style-type: none"> • pH balanced • Sensitive • Easy • Refresh
Odor Eliminating Film	VCF	Vaginal film	Purified water, polyvinyl alcohol, glycerin USP, lactic acid USP FCC , vanilla bean fragrance, potassium sorbate FCC, polysorbate 85	<ul style="list-style-type: none"> • Odor eliminating • Fresh • Confident • Healthy vaginal balance
Extra Cleansing Vinegar & Water Douche	Summer's Eve	Douche	Water, sodium chloride, vinegar, citric acid , sodium benzoate	<ul style="list-style-type: none"> • Gynecologist tested • Hypoallergenic • pH balanced
Rosehip Oil Gentle Wash	Summer's Eve	Wash	Water, sodium laureth sulfate, sodium chloride, lauryl glucoside, cocamidopropyl betaine, rosa canina fruit oil, polyquaternium-7, lactic acid , sodium benzoate, disodium EDTA, sodium lactate, fragrance	<ul style="list-style-type: none"> • Gynecologist tested • pH perfect • Gentle • Safe for everyday use
Simply Sensitive Cleansing Cloths	Summer's Eve	Wipes	Water, propylene glycol, polysorbate 20, disodium cocoamphodiacetate, 2-bromo-2-nitropropane-1,3-diol, disodium phosphate, fragrance, citric acid , disodium EDTA, iodopropynyl butylcarbamate, PEG-75 lanolin, aloe barbadensis leaf juice (decolorized), tocopheryl acetate	<ul style="list-style-type: none"> • Gynecologist tested • Hypoallergenic • pH balanced • Safe for everyday use • Gently cleanses and freshens

products have been shown to suppress *Lactobacillus* growth at 2 hours after use and to kill all lactobacilli at 24 hours.¹⁰ Shifts in microbiota numbers often occur when the vaginal pH has been altered, as is frequently the case with feminine hygiene products. In the absence of microbiome bacteria, the presence of vaginal hygiene products has been shown to increase interleukin-8 (IL-8), suggesting a proinflammatory reaction.¹⁰

A study in the United Kingdom found that women who used bubble bath, antiseptics, or

douche products had a higher incidence of bacterial vaginosis compared with women who did not use such products.⁷ Women in Canada who used feminine hygiene products were more likely to report adverse conditions, including yeast infections, bacterial vaginosis, urinary tract infections, and sexually transmitted diseases.⁸ Furthermore, a significant association exists between vaginal douching and endometrial infection by bacterial vaginosis-associated organisms.¹²

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TABLE Common feminine hygiene products (continued)

Product	Brand	Formulation	Ingredients ^a	Marketing terms
Clean Cotton Deodorant Wipes	Lume	Wipes	Water, organic aloe barbadensis leaf juice, hamamelis virginiana water, Saccharomyces ferment filtrate, Lactobacillus ferment, glycereth-7 triacetate, cocos nucifera fruit extract, Lactobacillus, mandelic acid , caffeine, caprylyl/capryl glucoside, sodium cocoyl glutamate, polyglyceryl-5 oleate, glyceryl caprylate, caprylyl glycol, citric acid , alcohol, tetrasodium glutamate diacetate , sodium benzoate, naturally derived fragrance	<ul style="list-style-type: none"> • Doctor developed
The Killer (Boric Acid Suppositories)	Love Wellness	Suppositories	Boric acid , gelatin (capsule)	<ul style="list-style-type: none"> • Balance
pH Balancing Cleanser	Love Wellness	Wash	Water, aloe vera leaf juice, decyl glucoside, disodium cocoyl glutamate, lactic acid , carageenan, sodium PCA, calendula extract, glycerin, leuconostoc/radish root ferment filtrate, propanediol, benzyl alcohol, pentylene glycol, sodium cocoyl glutamate, acacia senegal gum, xanthan gum, tetrasodium glutamate diacetate	<ul style="list-style-type: none"> • ObGyn recommended • pH balancing • Gentle
Love Wellness Mini Do It All Wipes	Love Wellness	Wipes	Water (aqua), musa sapientum (banana) fruit extract, aloe barbadensis leaf juice, potassium sorbate, cocoglucosides hydroxypropyltrimonium chloride, phenethyl alcohol, glycerin, cocos nucifera (coconut) oil, caprylhydroxamic acid , citric acid , tocopheryl acetate, chamomilla recutita (matricaria) flower extract	<ul style="list-style-type: none"> • pH balanced • Natural
VV Cream Gentle Wash	The Perfect V	Wash	Aqua (water), rosa damascena flower, water (rosehips), sodium cocoamphoacetate, cocamidopropyl betaine (derived from coconut oil), lauryl glucoside, glycerin (derived from sustainable palm), sodium chloride, coco glucoside (derived from coconut oil), glyceryl oleate, glycol distearate, lactic acid , sodium benzoate, mannitol, sodium lactate , vaccinium myrtillus extract (bilberry), potassium sorbate, saccharum officinarum extract (sugar cane), ammonium glycyrrhizate, glyceryl stearate, PEG-40, hydrogenated castor oil, sodium phytate, citrus aurantium dulcis fruit extract (orange), citrus limon fruit extract (lemon), caffeine, zinc gluconate, acer saccharum extract (sugar maple), benzoic acid , prunus persica (peach) kernel oil, vaccinium myrtillus fruit extract (bilberry), aesculus hippocastanum seed extract (horse chestnut), hippophae rhamnoides seed oil (sea buckthorn), citric acid	<ul style="list-style-type: none"> • Gentle • pH balanced

Additionally, a study that analyzed volatile organic compound levels in the blood with the use of feminine hygiene products revealed a significant positive dose-exposure relationship between the frequency of vaginal douching in the last 6 months and concentrations of 1,4-dichloromethane, one of the volatile organic compounds.³ This points to the issue of not only disruption of pH and

vaginal flora but also to the introduction of harmful substances that can further disrupt the vaginal barrier.

Understand the products to help educate patients

Use of feminine hygiene products is common among women. While women depend

TABLE Common feminine hygiene products (continued)

Product	Brand	Formulation	Ingredients ^a	Marketing terms
VV Beauty Sheets	The Perfect V	Wipes	Aqua (water), aloe barbadensis leaf juice, polysorbate 20, sodium lactate , benzyl alcohol, glycerin (derived from sustainable palm), ethylhexylglycerin, panthenol, lactic acid , salicylic acid , bisabolol, calendula officinalis flower extract (marigold flowers), PEG-40 hydrogenated castor oil, rubus chamaemorus fruit extract (arctic cloudberry), vaccinium myrtillus fruit extract (bilberry), anthemis nobilis flower extract (chamomile), sorbic acid , potassium sorbate, sodium benzoate, rosa canina fruit extract (rosehips), sambucus nigra flower extract (elder flower), vaccinium vitis-idaea leaf extract (lingonberry), citric acid , hippophae rhamnoides seed oil (sea buckthorn)	<ul style="list-style-type: none"> • Refresh • pH balanced • Natural • Gentle • Sexual wellness

^a Boldface terms are associated with ingredients that can contribute to changes in vaginal pH.

on the market to filter out products that are considered unsafe or may have harmful side effects,¹ unfortunately that is not necessarily the case. With increasingly more feminine products on the market and the target demographic becoming younger, women of all ages are susceptible to misinformation that could affect their vaginal health long term.

It is vital that clinicians understand the topical effects of these products in order to properly educate and counsel patients. Ultimately, research on feminine hygiene products is limited and, as more products come to market, we must continue to reassess the effects of topical products on the vaginal epithelium and vulvar tissues. ●

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