



## **Social Differences in Women's Use of Personal Care Products: A Study of Magazine Advertisements, 1950-1994**

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Personal care products are of concern for their potential effects on women's health. Most women use some personal care products, and some women use numerous products daily over long periods. Many personal care products contain synthetic chemicals, including some that may alter the body's natural endocrine system. Research over the past 10 years has revealed that many compounds in everyday products can weakly mimic hormones, including estrogen, or block the action of natural hormones. Such compounds, known as endocrine disruptors, may affect breast cancer risk, for example, since a woman's risk of breast cancer is related to her lifetime exposure to estrogen.

This study of magazine advertisements for women's personal care products from 1950 through 1994 gives a picture of products that are likely to have been widely used by women since the advent of synthetic organic chemicals. This effort serves the broad objective of identifying differences in product use across age, ethnic, or socioeconomic groups—differences that could affect women's risk of breast cancer or other health problems. By including magazines with different audiences, and by identifying a broad range of products marketed to women up to 50 years ago, this work will inform future study of demographic differences in women's use of personal care products.

### **Methods**

The study examined advertising for women's personal care products from 1950 through 1994 in widely read, long-lived magazines whose audiences have different demographic profiles: *Ladies' Home Journal*, *Mademoiselle*, and *Essence* (see [Table 1](#)). Readers of *Ladies' Home Journal* are older and less educated than readers of *Mademoiselle*, are more likely to live in suburban rather than urban areas, and are more likely to be married or widowed. Because the readership of both magazines is mostly white, a magazine with a predominantly African-American readership, *Essence*, was included. In median age and marital status, readers of *Essence* are closer to those of *Mademoiselle*; in education, they are closer to readers of *Ladies' Home Journal*. They are more urban and have lower income than readers of the other magazines. Because *Essence* began publication only in 1970, *Ebony* was examined in its place for the earlier years, when there was no national magazine for African-American women.

For each magazine, we selected a one-in-five sample of all issues 1950-94. Specifically, for each five-year period, we randomly selected one of the five January issues, one of the five February

issues, and so forth through December, yielding a "constructed year" of 12 issues. In each issue selected, we recorded all advertisements for a list of products developed for the study. The list of some 40 products included hair and scalp care products, skin and nail care products, deodorant and antiperspirant products, and feminine care products, as well as laxatives and nonprescription products for urinary tract infections. Ads for products specifically for men were not included in the analysis.

## Results and Discussion

The study documented differences in advertising across magazines that suggest women with different backgrounds have different habits of product use. Although the largest number of individual products was advertised in *Essence/Ebony*—25% more than in *Mademoiselle* and more than twice as many as in *Ladies' Home Journal*—the number of advertisements and the number of pages devoted to advertising were highest in *Mademoiselle* (see [Figure 1](#)). By all three measures, advertising was about twice as intensive in *Mademoiselle* as in *Ladies' Home Journal*.

In all the magazines, most of the advertising for the products studied was devoted to hair/scalp and skin/nail care products (see [Figure 2](#)). In *Ladies' Home Journal* and *Mademoiselle*, more than half of the products advertised were for skin care, and about one-quarter for hair care. In *Essence/Ebony*, by contrast, hair care products predominated: about one-half of the products advertised were for hair care and one-third for skin care. (The same pattern holds when the *Essence* years are examined separately.)

Selected findings about specific types of products are described below.

### *Advertising for Hair and Scalp Care Products*

Somewhat different products for hair and scalp care, with distinctive features, were marketed to the readerships of the three magazines. Advertisements for lice shampoos appeared only in *Ladies' Home Journal* (see [Figure 3](#)). Scalp treatments were advertised almost exclusively in *Essence/Ebony*, and most of these products were creams. Hair pressing products were advertised only in *Essence/Ebony* and mostly before 1970—that is, in *Ebony*. Hair styling products other than pressing products were advertised in all the magazines, but appeared much more frequently in advertisements in *Essence/Ebony* than in the other magazines. Almost 90% of such styling products advertised in *Ebony*, and about 25% in *Essence*, were creams—a form that was unusual in *Ladies' Home Journal* and *Mademoiselle*. From 1970 on, hair sprays were the most common styling products in *Ladies' Home Journal*, *Mademoiselle*, and *Essence*. The form of a product may determine how most exposure to it occurs—through the skin, for example, or by inhalation—and may also affect its chemical formulation.

Hair care products were advertised as containing hormones or placenta only twice in the sampled issues of *Mademoiselle*, and never in *Ladies' Home Journal*. By contrast, in the sampled issues of *Essence/Ebony*, more than 70 hair or scalp products were advertised as containing either hormones or placenta (see [Figures 4](#) and [5](#)). This finding is of particular interest in the context of recent research suggesting that use of hair products containing placenta or hormones may be linked to premature sexual development in African-American children (1). In all three magazines, a small number of skin products, mostly facial moisturizers and foundations, were advertised as containing hormones (see [Figures 6](#) and [7](#)).

### *Advertising for Nail Care Products*

From 1970 on, nearly 250 nail polish and nail strengthening products were advertised in the sampled issues of *Mademoiselle*—more than twice the number in *Essence* and more than three times the number in *Ladies' Home Journal*. Such nail products contain phthalates, many of which have been identified as endocrine-disrupting compounds. The advertising pattern observed in this study has special interest in light of the US Centers for Disease Control and Prevention's recent finding that the phthalates detected at the highest concentrations in people's urine are those used in cosmetics, including nail products (2).

### *Advertising for Specific Ingredients*

Other ingredients of personal care products, in addition to hormones and placenta, were also explicitly advertised for their effectiveness. The study highlights the prolonged marketing of two chemicals that were later restricted in cosmetic products. The antibacterial hexachlorophene was frequently advertised in deodorant products during the 1950s and 1960s (see [Figure 8](#)) and, to a lesser extent, in scalp treatments. Similarly, ammoniated mercury was regularly advertised as the active ingredient in skin bleaching creams in *Ebony* in the 1950s and 1960s (see [Figure 9](#)). Use of both hexachlorophene and mercury in cosmetics was restricted by the US Food and Drug Administration in the early 1970s because of their neurotoxic effects and ability to penetrate the skin.

Since 1970, nonoxynol-9 has been regularly advertised as the active ingredient in vaginal spermicides in all three magazines studied (see [Figure 10](#)). In the issues studied here, several ads for spermicides claim that nonoxynol-9 has no hormonal side effects. Research on nonoxynol-9's possible systemic effects in women's bodies is in fact limited—although a breakdown product of this chemical has been shown to have estrogen-like effects on cultured breast cancer cells in laboratory experiments (3).

### **Limitations**

This study is several steps removed from linking the use of personal care products to health effects in women. We do not know how advertising of products corresponds to women's use of products, what chemicals are actually in the advertised products, how the body takes up or transforms those chemicals, or how such exposures may be linked to disease. In addition, the lack of a national magazine targeted specifically to African-American women before 1970 limits our understanding of products marketed to this group in the 1950s and 1960s.

### **Conclusions**

This research reinforces the understanding that women in different age, ethnic, or socioeconomic groups are likely to have different patterns of use of personal care products. By characterizing products advertised to women as far back as 1950, including some no longer in use, the study lays a foundation for future research on social differences in women's use of personal care products. Such work in turn may inform the study of demographic patterns in women's health. The present study also reminds us that we have sometimes been slow to appreciate the limits of our knowledge of health risks from familiar products.

## References

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2. Blount, B.C., Silva, M.J, Caudill, S.P., Needham, L.L., Pirkle, J.L., Sampson, E.J., Lucier, G.W., Jackson, R.J., and Brock. J.W. Levels of Seven Urinary Phthalate Metabolites in a Human Reference Population. *Environmental Health Perspectives* 108:979-982 (2000).
3. Soto, A.M., Justica, H., Wray, J.W., Sonnenschein, C. p-Nonylphenol: an Estrogenic Xenobiotic Released from “Modified Polystyrene.” *Environmental Health Perspectives* 92:167-173 (1991).

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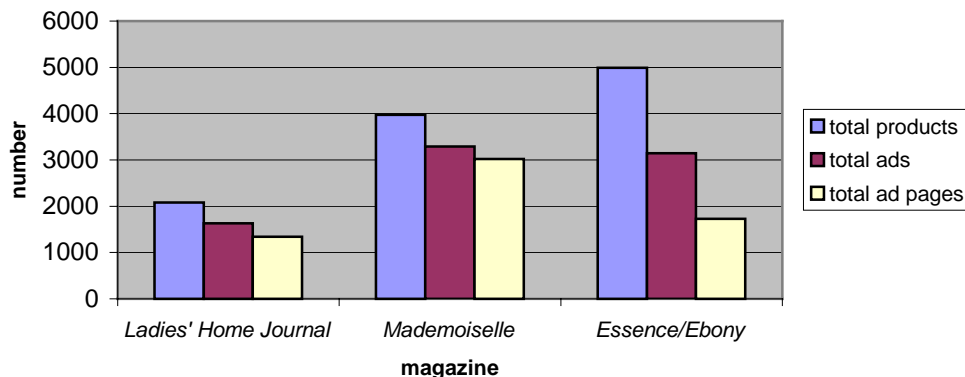
Silent Spring Institute is a nonprofit research organization dedicated to identifying links between the environment and women's health, especially breast cancer.

**Table 1: Characteristics of Female Readers  
of Four Magazines**

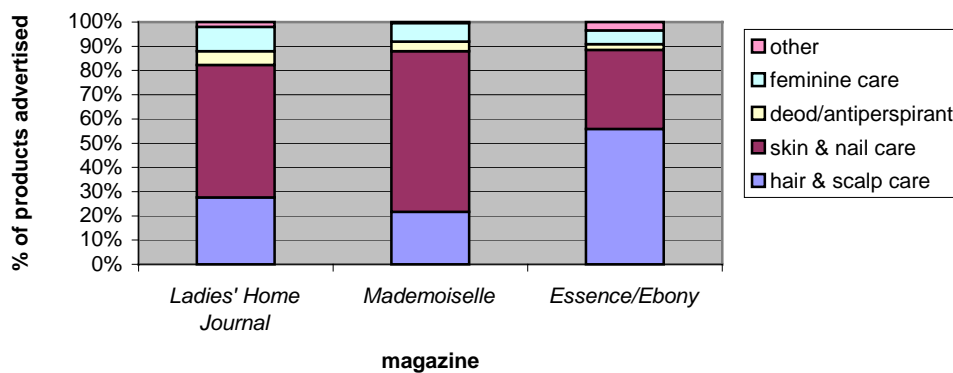
<b>Magazine</b>	<b>Median Age</b>	<b>% Married or Widowed</b>	<b>% At Least Some College</b>	<b>Median Household Income (\$)</b>	<b>% Urban</b>	<b>% African-American</b>
<i>Ladies' Home Journal</i>	46.7	76.7	40.6	37,863	24.8	7.4
<i>Mademoiselle</i>	29.9	40.0	47.2	39,203	38.1	11.3
<i>Essence</i>	35.6	39.7	39.4	27,068	51.5	88.6
<i>Ebony</i>	37.4	44.5	32.3	22,944	52.9	88.7

Source: Simmons Market Research Bureau, Study of Media and Markets, 1994.

**Figure 1: Advertising for Selected Women's Personal Care Products in Sampled Issues, 1950-94**



**Figure 2: Major Groups of Products Advertised in Sampled Issues, 1950-94**



**Figure 3: Number of Hair Care Products Advertised in Sampled Issues, 1950-94**

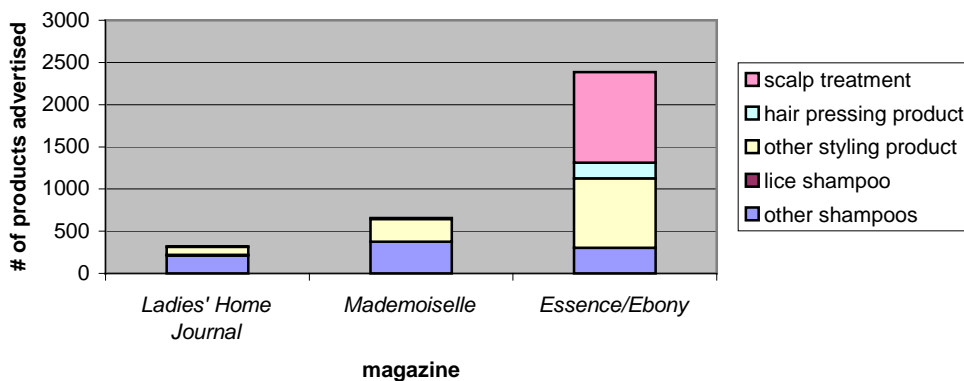


Figure 4: Advertisement for hair care product containing hormones: LeKair Hair Treatment, Essence, 1980

**SOFT AND EASY**  
**LeKair**  
**HAIR TREATMENT**

You'll feel the difference. Smooth, radiant, soft to touch hair with the stimulation of hormones plus Vitamin E.

LeKair hair treatment is formulated to help stop dandruff, scalp itch, thinning and falling hair. Isn't it time for your treat?

**LE KAIR GUARANTEES SATISFACTION OR YOUR MONEY BACK.**  
AVAILABLE AT LEADING HAIRDRESSING SHOPS, BEAUTY SALONS AND COSMETIC COUNTERS.

Figure 5: Advertisement for hair care product containing placenta: Perm-Aid with Placenta, Essence, 1984





Figure 6: Advertisement for skin cream containing estrogenic hormones: Satura, by Dorothy Gray, *Ladies' Home Journal*, 1956

Journal, 1956

Dramatic results!

# Satura!

Combines 3 scientific discoveries to help your skin look younger and chiffon-fine

The miracle you cry over on a film of fluffy petals... Satura 2 disappears into your skin and begins working 3 exciting ways:

- 1. Estrogenic hormones**, 10,000 vital units per ounce, work actively beneath the skin... restore your diminishing natural hormone supply... help stretch out and cushion away lines and bly wrinkles!
- 2. Special moisturizers** slow down the excessive evaporation that dries your skin and makes it unattractive. They also pull moisture from the air and lock it softly on your skin to give you that younger, dewy look.
- 3. Vitamin A** staunchly guards your skin against flaky, scaly dryness.

Satura has proved itself over and over again. Tonight and every night, wear it to, greenness, wrinkles Satura... the very essence of today's most important beauty discoveries! 2 ounces, \$3.50; 4 ounces, \$5.00.


**Save Satura!** Invest in a tin of Satura in the morning and at bedtime.

© Dorothy, Inc.

For beauty the modern way

## Dorothy Gray

Figure 7: Advertisement for skin cream containing estrogenic hormones: Anatome, by Germaine Monteil, *Mademoiselle*, 1956



**Beauty**  
*is not a gift... it is a habit.*  
*make it yours by spending a few minutes a day on the care of your skin.*

*cleanse* with SUPER-3 LIQUID CLEANSER or CLEANSING CREAM and SKIN FRESHENER  
*restore* with NIGHT and ROSE CREAMS of ANATOME, an estrogenic hormone cream  
*awaken* with PLASTIC CREAM and ASTHENGENT  
*protect* with BEAUTY BALM or ANATOME FLUID MAKE-UP  
*beautify* with SUPERGLOW FLUID MAKE-UP, FACE POWDER, and LIPSTICK  
— loveliest of cosmetics, all radiant with the brightness of  
"Luminium," the light-reflecting ingredient that is Monteil's alone.

**Germaine Monteil**  
NEW YORK • PARIS

Figure 8: Advertisement for deodorant containing hexachlorophene: Mum Cream Deodorant, *Ladies' Home Journal*, 1956

**NEW MUM. CREAM**

The doctor's deodorant discovery  
that now safely stops odor 24 hours a day

**Underarm comparison tests made by doctor proved a deodorant without M-3 stopped odor only a few hours—while New Mum with M-3 stopped odor a full 24 hours!**

You're serene, you're sure of yourself. You're just as perfect from the skin out. And you stay that way night and day with New Mum Cream. Because New Mum now contains M-3 (hexachlorophene) which clings to your skin—keeps on stopping perspiration odor 24 hours a day. So safe you can use it daily—won't irritate normal skin or damage fabrics.

Another fine product of Bristol-Myers  Mind to your skin and clothes

a glamorous new you with a lighter, clearer skin

Brighten up your life! Your skin will come alive, and you will too, when you start using Dr. Fred Palmer's Skin Whitener, an exclusive formula for a lighter, smoother, lovelier complexion.

Easy and pleasant to use, containing effective ingredients repeatedly prescribed by doctors for skin care and for removing unsightly discoloration from hands, elbows, and knees. Also recommended as an aid in eliminating blackheads and refining enlarged pores. This treatment has been attested to and proven thoroughly effective by women of all color tones the world over.

Try it . . . you will love your new look and he will too . . .

And for that extra complexion care . . . Dr. Fred Palmer's Facial Soap . . . fine and quick lathering, with a wonderfully effective cleansing action. (Dear luxury!)

If not available in your locality, send \$1 for a large jar and a beauty box of Facial Soap.

**Dr. Fred PALMER'S SKIN WHITENER**

P. O. BOX 3457 SW, SAVANNAH, GA

Figure 9: Advertisement for skin bleaching cream containing ammoniated mercury: Dr. Fred Palmer's Skin Whitener, *Ebony*, 1965

Figure 10: Advertisement for vaginal spermicide containing nonoxynol-9: Encare, *Mademoiselle*, 1980

Small, discreet, no bigger than your fingertip, Encare is fast becoming the talked about contraceptive we use today.

Free from hormonal side effects, it is available without a prescription. And it might well be the simplest method of birth control you've ever used.

**Simply safe.**  
Simply insert Encare with the tip of your finger. There's no fiddly measuring tubes, no applicators. And no paraphernalia to clean up afterward.

Each tiny insert contains an exact, premeasured amount of clinically proven spermicide, nonoxynol-9.

**Simply effective.**  
Very simply, Encare works by neutralizing sperm. When used properly, Encare melts and gently effervesces, spreading within your vagina for protection against pregnancy.

Even under very rigorous testing conditions, Encare's spermicide was found to be highly effective.

**Simply safe.**  
And if you ask your gynecologist about Encare, you'll be reassured to hear that Encare cannot harm your body the way the pill or IUD might. Which means, you simply won't be worried about these complications.

For maximum protection, it is essential that you read and follow directions carefully, and if indicated, consult your physician. No birth control method is guaranteed to prevent pregnancy.




**Encare**  
vaginal spermicide  
for protection against pregnancy

12 INSERTS

**Birth control, simplified.**