

TABLE 1—Fluoride Content of All Bottled Water Sources Licensed for Sale in Rhode Island or Massachusetts in 1994

Fluoride, Parts per Million	Rhode Island (n = 84), %	Massachusetts (n = 76), %
<0.3	79	87
0.3–0.7	14	11
0.71–1.0	6	1
>1.0	1	1

foreign bottled waters licensed for sale to be fluoride deficient, with concentrations ranging up to 1.60 parts per million in Massachusetts and 2.68 parts per million in Rhode Island (Table 1).

A survey at two community health centers in Rhode Island during 10 days in March 1994 showed that, of all 124 patient households responding, 55% used only bottled water for drinking, and 59% of households with children did so. The response rate was admittedly low. The patient population is largely immigrant (42% Hispanic), with only 20% non-Hispanic and non-Portuguese Whites. Most were either on public assistance (60%) or uninsured (20%), yet 52% of children on public assistance and 36% of the uninsured used bottled water. Reasons cited included health and safety concerns (50%) and taste (43%). Only 7 families (11 children) were receiving fluoride supplements.

Because the fluoride content of bottled waters varies and manufacturers can freely change the source of water bottled under a particular label, it is nearly impossible for parents and health care providers to ascertain the fluoride content of the water ingested by a child. This poses a serious obstacle for complying with guidelines on fluoride supplementation. I believe this is a public health issue that should be addressed at the regulatory level. □

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Outercourse as a Safe and Sensible Alternative to Contraceptives

Anke Ehrhardt's editorial, "Our View of Adolescent Sexuality,"¹ in the November 1996 issue of the *Journal*, together with the article in the same issue by Schuster et al.,² carries a very important hidden message for the overpopulated world: that there is a largely unadvertised, cost-free, natural, and effective way for teenage and adult couples to prevent unwanted pregnancy and sexually transmitted disease while making love. It requires no equipment or medication and is evidently harmless. Ehrhardt and others suggest that it may be psychologically better for adolescents than trying, usually unsuccessfully, to suppress sexual activity out of fear of pregnancy or disease. It may even help in developing normal, healthy sexuality.

Schuster et al. report that, in a study of more than 2000 Los Angeles high school students, almost half claimed never to have had vaginal intercourse; surprisingly, about 30% said they were already making love using this natural method. One has to wonder whether, if this natural method were properly publicized and widely taught in school sex education classes (with appropriate emphasis on it being natural and healthy, both physiologically and psychologically), one would see a substantial reduction of both unwanted pregnancies and sexually transmitted diseases. Why has this natural method not been widely promoted? Is it because there is no money to be made from it? Are authorities afraid of promoting it? Perhaps both.

This natural method has been called heterosexual "outercourse." It consists simply of heavy petting with mutual manual masturbation to orgasm of both partners, without penile penetration of the vagina and avoiding getting any semen into the vulva or vagina. (Now that human immunodeficiency virus/acquired immu-

nodeficiency syndrome infection is to be feared, the couple must also avoid getting semen or vaginal fluid into any open cut or sore. Also, of course, anal or oral intercourse is to be avoided.)

The historical censure of masturbation by a few traditional religions probably harks back to the time, many centuries ago, when the world was so underpopulated that it appeared important to urge people to "be fruitful and multiply." Perhaps a different message is appropriate today.

Historically, prevention of unwanted pregnancy was attempted by trying to keep pubescent and adolescent girls away from all contact with pubescent boys and men until marriage. In some cultures, including most Muslim countries, child marriages may still be arranged by the parents, female genital mutilation may still be practiced, and many women still are in purdah.

As the age of menarche has dropped from about 17 years in Northern Europe in the late 19th century to about 12 years today,^{3,4} as education of women has become popular and desirable in coeducational schools and colleges, and as the age of marriage has risen through the 20s and even into the 30s, it has become increasingly difficult to suppress sexual activity for the 10 to 20 years between puberty and marriage. It simply does not work for the vast majority of normal young people.

There is reason to be concerned that psychosexual development may be warped, or worse, as a result of attempts to suppress normal sexual urges during adolescent years. Ehrhardt points out that "the unintended consequences of a narrow focus on fear and disease may lead to increased rates of sexual inadequacies, sexual distortions, and interpersonal problems for an entire generation."

Twenty-five years ago, my presidential address to the American Association of Planned Parenthood Physicians was titled "Non-Procreative Sexuality as an Alternative to Contraception."⁵ This paper recommended "outercourse" as a healthier, simpler, safer, and more natural method, but it fell on the deaf ears of that group of physicians whose chief interest was developing newer and better contraceptives. Our society was evidently not ready, then, to condone it. Perhaps it is now time for us to listen to the "teenagers" and give them encouragement and credit for working out this sensible solution, in spite of the old-fashioned attitudes of many in our society.

I commend the Journal for bringing this hitherto taboo matter to our attention and hope that, at last, our society can begin to deal with it sensibly and without hang-ups. □

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Erratum

In: Hight-Laukaran V, Rutstein SO, Peterson AE, Labbok MH. The use of breast milk substitutes in developing countries: the impact of women's employment. *Am J Public Health*. 1996;86:1235–1240.

Some of the numbers in the last column of Table 1 were incorrect. The corrected table is reprinted here.

TABLE 1—Calculations for Population Attributable Risk (PAR) Percentage for Use of Breast Milk Substitutes among Women with an Infant Less Than 6 Months of Age

Country	Use of Substitutes among Employed Women who Never Take Baby to Work	Use of Substitutes among Women Not Employed	Attributable Risk of Formula Use Due to Employment ^a	Women Employed Who Never Take Baby to Work (% Exposed)	Outcome Prevalences ^b	PAR % ^c
Brazil	92.3	71.0	21.3	11.6	73.5	3.4
Cameroon	35.9	23.8	12.1	10.3	25.0	4.8
Colombia	89.8	72.6	17.3	6.5	73.7	1.5
Dominican Republic	70.5	67.0	3.5	13.1	67.5	0.74
Egypt	41.3	31.3	10.1	9.3	32.2	2.8
Jordan	55.2	36.6	18.6	7.5	38.0	3.7
Morocco	57.6	35.6	22.0	6.2	37.0	3.8
Namibia	69.4	22.5	46.9	13.7	28.9	20.9
Niger	40.9	24.5	16.4	1.5	24.7	1.2
Nigeria	44.8	30.6	14.2	9.5	31.9	4.4
Pakistan	64.4	38.3	26.1	2.7	39.0	1.8
Paraguay	75.9	43.9	32.0	10.4	47.2	7.0
Peru	58.5	32.7	25.8	19.2	37.7	13.3
Rwanda	53.1	13.5	39.6	5.3	15.6	13.5
Zambia	51.4	15.2	36.1	8.0	18.1	16.0

Note. The PAR percentage as given here can be interpreted as the percentage of breast milk substitute users attributable to employment away from the baby.

^aColumn 1 minus column 2.

^bDerived from the following (nos. represent the other columns): $\frac{(1)(4) + (2)[100 - (4)]}{100}$.

^cColumn 3 multiplied by column 4 and the product divided by column 5.