



## Waste Management Magazine

Latest News & Information On The Waste Mgmt Industry. Read More. [www.wasteadvantagemag.com](http://www.wasteadvantagemag.com)

[Ads by Google](#)

### Science News

[Share](#) [Blog](#) [Cite](#)

[Print](#) [Bookmark](#) [Email](#)

## Don't Blame the Pill for Estrogen in Drinking Water

*ScienceDaily* (Feb. 15, 2011) — Contrary to popular belief, birth control pills account for less than 1 percent of the estrogens found in the nation's drinking water supplies, scientists have concluded in an analysis of studies published on the topic. Their report suggests that most of the sex hormone -- source of concern as an endocrine disruptor with possible adverse effects on people and wildlife -- enters drinking water supplies from other sources. The report appears in ACS' journal *Environmental Science & Technology*.

#### See Also:

#### Health & Medicine

- Gynecology
- Birth Control

#### Plants & Animals

- Drought
- Agriculture and Food

#### Earth & Climate

- Water
- Recycling and Waste

#### Reference

- Hormone replacement therapy
- Estrogen
- Oral contraceptive
- Hormone

Amber Wise, Kacie O'Brien and Tracey Woodruff note ongoing concern about possible links between chronic exposure to estrogens in the water supply and fertility problems and other adverse human health effects. Almost 12 million women of reproductive age in the United States take the pill, and their urine contains the hormone. Hence, the belief that oral contraceptives are the major source of estrogen in lakes, rivers, and streams. Knowing that sewage treatment plants remove virtually all of the main estrogen -- 17 alpha-ethinylestradiol (EE2) -- in oral contraceptives, the scientists decided to pin down the main sources of estrogens in water supplies.

Their analysis found that EE2 has a lower predicted concentration in U.S.

drinking water than natural estrogens from soy and dairy products and animal waste used untreated as a farm fertilizer. And that all humans, (men, women and children, and especially pregnant women) excrete hormones in their urine, not just women taking the pill. Some research cited in the report suggests that animal manure accounts for 90 percent of estrogens in the environment. Other research estimates that if just 1 percent of the estrogens in livestock waste reached waterways, it would comprise 15 percent of the estrogens in the world's water supply.

Email or share this story:

[More](#)

#### Story Source:

The above story is reprinted (with editorial adaptations by ScienceDaily staff) from materials provided by [American Chemical Society](#).

#### Journal Reference:

1. Amber Wise, Kacie O'Brien, Tracey Woodruff. **Are Oral Contraceptives a Significant Contributor to the Estrogenicity of Drinking Water?** *Environmental Science & Technology*, 2010; : 101026133329091 DOI: [10.1021/es1014482](https://doi.org/10.1021/es1014482)

Need to cite this story in your essay, paper, or report? Use one of the following formats:

- APA American Chemical Society (2011, February 15). Don't blame the pill for estrogen in drinking water. *ScienceDaily*. Retrieved February 16,
- MLA



*Birth control pills. Contrary to popular belief, birth control pills account for less than 1 percent of the estrogens found in the nation's drinking water supplies, scientists have concluded in an analysis of studies published on the topic. (Credit: iStockphoto/Stefan Redel)*

#### Ads by Google

##### Tap Water Filtration

Review Tap Water Filters  
Review Performance, Web Discounts!  
[WaterFilterComparisons.com](http://WaterFilterComparisons.com)

##### Iron & Manganese Removal

AdEdge AD26 Technology  
For Water Treatment Systems  
[www.adedgetech.com](http://www.adedgetech.com)

##### Wildlife Rescue Efforts

Learn How Wildlife Is Being  
Saved From The Recent Oil Spill.  
[www.Facebook.com/DawnSavesWildlife](http://www.Facebook.com/DawnSavesWildlife)

##### Singapore Water Systems

Set to Become a Global Hydrohub.  
We are Innovating for the Future!  
[www.SEDB.com/Future-Ready](http://www.SEDB.com/Future-Ready)

#### Related Stories

**Converting Sewage Into Drinking Water: Wave Of The Future?** (Jan. 30, 2008) — Amid growing water shortages in parts of the United States, more communities are considering tapping their sewage treatment plants as a new source of drinking water. In January, 2008, California ... > [read more](#)

**Real-World Proof of Hand Washing's Effectiveness** (May 5, 2010) — Scientists are reporting dramatic new real-world evidence supporting the idea that hand washing can prevent the spread of water-borne disease. It appears in a new study showing a connection between ... > [read more](#)

**New Water Filtration Materials Help Assure Safe Drinking Water** (Apr. 24, 2007) — A new generation of water filtration materials is enabling municipalities and industries in the United States and water-short countries overseas to produce safe drinking water from supplies ... > [read more](#)

**Private Drinking Water Supplies Pose Challenges to Public Health** (Apr. 6, 2010) — An estimated three to four million people -- about one in every eight Canadians -- drink water from private supplies. Infrequent testing and maintenance puts consumers of these water supplies at ... > [read more](#)

#### Just In:

[Monitoring Killer Mice from Space](#)

#### Science Video News



##### Safer Water Worldwide

Industrial toxicologists at a non-profit venture founded by Procter & Gamble developed PUR, a water purifier that combines a flocculant -- which. ... > [full story](#)

[New Software Helps Track the Path of Toxic Spills](#)

[Environmental Scientists Use Fish Behavior To Monitor Water Quality](#)

[Seismologists Devise New Technique To Measure Pollution](#)

[more science videos](#)

Treat yourself to better RNA purification

Try it on us >

**invitrogen**  
by life technologies

#### Breaking News

... from NewsDaily.com

[Delay hits Ariane launch to supply space station](#)

[Scientists question U.S. anthrax attack evidence](#)

[Monarch butterfly count bounces back from bad year](#)

[U.S. budget ups support for commercial space flight](#)

[FDA approves Hologic 3-D breast scan, radiation unclear](#)

[more science news](#)



#### In Other News ...

[Mexico gunmen kill U.S. customs agent, wound another](#)

[Madoff says banks had to know of Ponzi scheme: report](#)

[Iran MPs want death penalty for opposition leaders](#)

2011, from <http://www.sciencedaily.com/releases/2010/12/101208125813.htm>

Note: If no author is given, the source is cited instead.

**Disclaimer:** This article is not intended to provide medical advice, diagnosis or treatment. Views expressed here do not necessarily reflect those of ScienceDaily or its staff.

Health & Medicine   Mind & Brain   Plants & Animals  
number of stories in archives: 98,153

**Search ScienceDaily**

**Ads by Google**

**Irrigation Companies**

sales-rentals  
Agricultural Irrigation Specialist  
[www.shimmonirrigation.com](http://www.shimmonirrigation.com)

**Water/WasteWater Control**

Applied Control Systems  
for your plant and process  
[www.ge-ip.com/water](http://www.ge-ip.com/water)

**Consulting for EPA EDSP**

Evaluation of Existing Data  
Hormone effects on endocrine system  
[www.smithersviscient.com](http://www.smithersviscient.com)

**Hazardous Waste**

Transportation and Disposal  
24/7 Spill Response 800.988.4424  
[www.HCIENV.com](http://www.HCIENV.com)

Iraqi defector fabricated WMD intelligence: report

Obama warns spending cuts could hurt U.S. recovery

D.Boerse unveils NYSE deal, now faces bumpy ride

United Airlines grounds 96 Boeing 757s

Bahrain protesters camp overnight to demand change

*more top news*

EXCLUSIVE ONLINE OFFER

Search

XFINITY TRIPLE PLAY  
\$99  
A MONTH FOR 12 MONTHS

PLUS  
HBO®  
FOR 3 MONTHS

.....

\$50  
PREPAID CARD

GET IT NOW

xfinity

Find with keyword(s):  Search

Enter a keyword or phrase to search ScienceDaily's archives for related news topics, the latest news stories, reference articles, science videos, images, and books.

About ScienceDaily® | Editorial Staff | Awards & Reviews | Contribute News | Advertise With Us | Privacy Policy | Terms of Use

Copyright © 1995-2010 ScienceDaily LLC — All rights reserved — Contact: [editor@sciencedaily.com](mailto:editor@sciencedaily.com)

Note: This web site is not intended to provide medical advice, diagnosis or treatment.

Part of the **iVillage Your Total Health Network**

Copyright Reuters 2008. See [Restrictions](#).

**Free Subscriptions** ... from ScienceDaily

Get the latest science news with our free email newsletters, updated daily and weekly. Or view hourly updated newsfeeds in your RSS reader:

- [Email Newsletters](#)
- [RSS Newsfeeds](#)

**Feedback** ... we want to hear from you!

Tell us what you think of ScienceDaily -- we welcome both positive and negative comments. Have any problems using the site? Questions?

Your Name:

Your Email:

Comments:

Click button to submit feedback: