

# Disposal of pet pharmaceuticals, personal care products

STEVE LUNDEBERG  
Oregon State University

CORVALLIS, Ore. – If no one told you the proper way to get rid of those leftover heartworm pills, bottles of flea shampoo and other pet care products your household no longer needs, you're not alone.

New research from Oregon State University found that more than 60 percent of veterinary care professionals do not counsel their clients when it comes to the environmental stewardship aspect of medicine disposal – findings that are troublesome but also represent an opportunity to dramatically reduce watershed contaminants.

“People are just starting to understand the impact that discarded pharmaceuticals and personal care products have on the environment,” said the study's corresponding author, Jennifer Lam, who worked on the research while a graduate student in marine resource management at Oregon State University.

“This study opens the door and shows a communication gap, shows where there's an opportunity to help educate people. There's not much communication going on between veterinary care professionals and their clients on how to dispose of expired pet medicines, meaning there's a lot of potential for those professionals to help their clients learn what to do.”

Lam, now a senior analyst for Blue Earth Consultants, and other researchers at OSU surveyed 191 pet owners and found nearly half of them got rid of unneeded care products and medicine via the garbage; Blue Earth, based in Oakland, California, is an environmental management consulting division of ERG.

Researchers surveyed 88



OREGON STATE UNIVERSITY

It's tempting to discard of unneeded pet and human pharmaceuticals and care products via flushing, but don't; they can contaminate watersheds.

environmental educators and 103 veterinary care professionals. The survey revealed 61 percent of the veterinary professionals did not share information about proper disposal with their clients. And the 39 percent who reported sharing that information did so 19 percent of the time – roughly one appointment in five.

“It's not a popular topic to bring up,” said Lam, who noted the professionals listed a number of barriers to communication, including lack of knowledge about proper disposal, time, cost and lack of concern on the part of both client and care provider.

“Survey respondents said their professional organizations, such as their veterinary associations, are their top source for disposal information,” Lam said. “This shows that veterinary-care professionals can serve as role models for other pet owners on environmental stewardship practices.”

Scientists have long known about the potential environmental effects stemming from the use and disposal of products aimed at keeping people healthy and clean, but with roughly seven in 10 Americans owning at least one

pet, animal medications and other care products are slowly beginning to move into the spotlight too.

Pet supplies and over-the-counter pet medications are a nearly \$15 billion industry in the U.S. Veterinary care including prescription medicine is close to a \$16 billion chunk of the economy. Both figures are on the rise.

“But you can count on one hand the number of studies that have been done on what people actively do with the disposal of PPCPs – pharmaceutical and personal care products – for both themselves and their pets,” said Sam Chan, a watershed health expert with the Oregon Sea Grant program at Oregon State. “PPCPs are used by almost everyone and most wastewater treatment plants are not able to completely deactivate many of the compounds they include.”

Increasingly, Chan said, chemicals from PPCPs for people and pets are being found at low levels in groundwater and surface water; anti-inflammatories, antidepressants, antibiotics, estrogens, insect repellent, antimicrobials and sunscreen compounds are among what's being detected.



## Healthy Bytes: Broccoli Basics

By Stephanie Polizzi, MPH,  
Registered Dietitian Nutritionist  
Healthy Eating Active Living (HEAL) Committee Chair

If you are trying to eat healthier, one of the first foods to add to your plate is broccoli. It belongs in the same plant family as cauliflower, cabbage and kale. Broccoli is rich in nutrients and can be delicious either raw or cooked.

### Health benefits

Broccoli is low in calories and provides an excellent source of antioxidants, such as vitamin C, that support eye health and help protect against cancer. Most people are unaware that broccoli contains both calcium and vitamin K which support bone health. Broccoli, which is high in fiber, can prevent constipation, reduce chronic inflammation, lower cholesterol and improve insulin sensitivity.

### Shopping for broccoli

Choose fresh broccoli that has compact, dark green heads or florets with no yellowing. Avoid broccoli that looks limp. Frozen broccoli is available all year round and might be cheaper than fresh.

### Store well and waste less

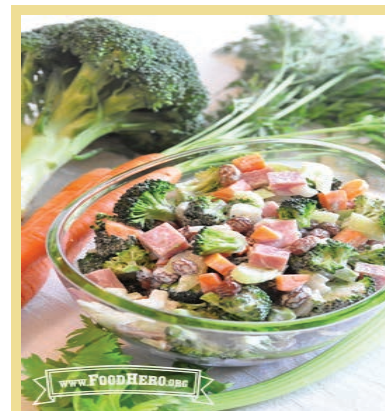
Store broccoli, unwashed, in open or perforated plastic bags, in your refrigerator. Use within about seven days for the best quality.

### How to prepare broccoli

To prepare, wash and cut florets and stalks (which are nutritious, too) into smaller pieces. Use raw for veggies trays with dip or hummus or toss into salads. Try pureeing raw broccoli for dips, or pesto for pasta. When cooking, steaming is preferred over boiling to retain nutrients. Cook on the stove top with a steaming basket, or in the microwave for about 3-4 minutes.

Learn more at [AdvancedHealth.com/Healthy-Bytes-Initiative](http://AdvancedHealth.com/Healthy-Bytes-Initiative)

Thanks to our sponsors for making the Healthy Bytes Initiative possible:



Broccoli & Everything Salad

### Ingredients

- 3 cups raw broccoli, chopped
- 1 medium carrot, peeled and diced
- 2 stalks celery, thinly sliced
- 1/2 cup raisins
- 1/4 cup onion, chopped
- 1 cup cooked ham, chicken or turkey
- 1/4 cup light mayonnaise
- 1/2 cup plain, nonfat yogurt
- 1 Tablespoon sugar
- 1 teaspoon vinegar

### Directions

1. Wash and prepare vegetables.
2. In a large bowl mix together broccoli, carrot, celery, raisins, onion and meat.
3. Mix together mayonnaise, yogurt, sugar and vinegar in a separate bowl.
4. Add mayonnaise mixture to salad and mix well. Refrigerate leftovers within 2 hours.

Try adding apples or jicama.

You can use dried cranberries instead of raisins. This salad can be prepared the day before and stored in the refrigerator. Makes 5 cups. Prep time: 15 minutes

Recipe provided by Food Hero: an Oregon State University Extension Service social marketing campaign. Find more great recipes at [FoodHero.org](http://FoodHero.org).