

WASHINGTON STATE UNIVERSITY



LEWIS COUNTY EXTENSION

Volume 4 Issue 7

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Editor Sheila Gray



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Crimson Pride

Fall Issue 2017

Fall is in the air! Our cat has decided that spending the night outdoors isn't so much fun anymore as she clamors to be let in at first light of the morning. She isn't the only creature seeking warmth and shelter as the temperatures begin to dip. There are other creepy crawlies and creatures looking for a haven to set up housekeeping. Check out our suggestions for minimal pesticide use to keep these unwanted guests at bay.

School is in session now for most locations, whether your students are enrolled at public or homeschool we have some terrific ideas to keep lunches fun and full of nutrition.

We have had several requests for workshops on goats and with that, we have two scheduled for folks. One is on FAMACHA, the how's and why's of what it is and how to look for it among your herd. The other is a two-day session, "All About Goats," that will cover topics from housing to feeding to selection of breeds. Registration info is within this issue.

Cooler weather also brings opportunity to plant winter gardens of a wide variety of greens and vegetables (think garlic!). And to brighten up our soon to come gray sky days consider primroses and pansies to add cheer to your garden beds. Welcome Fall!



What's Bugging you?

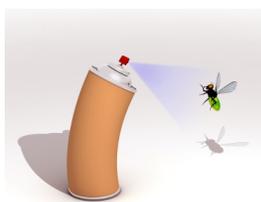
Control Household Pests Without Scary Poisons



When the creepies come crawling, it's tempting to reach for a can of "insect eliminator" and spray them away. But not so fast. "People have a knee-jerk reaction and think, 'I need poison now!'" says Miriam Rotkin-Ellman, a senior scientist in National Resources Defense Council's (NRDC) Health program. Even if all you want to see is those pests' feet in the air, she says, remember that there are often safer, nonchemical control methods that will solve your problem.

Integrated pest management, or IPM, focuses on preventing infestations before they start and using pesticides as a last resort. It's a low-cost, environmentally friendly solution that has been proven in studies to slash pest-removal costs by one-third—and pest complaints by 90 percent. A win-win, in other words.

Let's talk about pesticides



For the good of our health and planet scientists say we need to reconsider our dependence on synthetic pesticides. Since they came into widespread use after World War II, these toxic chemicals have seeped into 90 percent of our streams and rivers. The U.S. Centers for Disease Control and Prevention says Americans now have an average of 43 different pesticides in their bloodstreams. These are chemicals that can trigger everything from nausea, vomiting, and headaches to more serious concerns, such as lung damage, reproductive problems, and cancer. Pesticides are especially

hazardous to children, who spend more time closer to the ground where chemicals are often applied. Kids are also less resilient to these toxic chemicals than adults, and their developing brains are more susceptible to neurological problems and learning disabilities caused by exposure. Of all the cases of pesticide poisoning in the United States, half of them are in kids under six.

Less means more

The worst part of insecticide overuse and poisoning is these chemicals aren't always that effective. "Pesticides can't always eradicate pest infestations because they can't kill them off at every stage of their life cycles," Rotkin-Ellman explains. Consider fleas, which take about a month to hatch from eggs and develop into larvae, then pupae, and then adults. Many of the chemicals used in conventional flea treatments target only fully grown fleas. Meanwhile, human exposure to these chemicals can trigger dizziness, vomiting, and convulsions and have long-term effects on learning and behavior.

Just as they're sometimes ineffective, pesticides can also backfire and make bug infestations even worse. Spray them on an ant colony, for instance, and it can spur the ants to divide into multiple colonies and ramp up reproduction.

Seal it up

Enter IPM. A single treatment of that type "was more effective than the regular application of pesticides alone," according to a 2009 Environmental Health Perspectives study. The first line of defense with IPM is preventing vermin from entering your home at all. Repair ripped window and door screens. Seal bathroom and kitchen cracks with silicone caulk. In the rest of the house, plug openings that are larger than ¼ inch wide. Mice readily wriggle through such small holes—but not if sealed them with cement, steel wool, or other metals. **Remember: Vermin can chew through plastic, rubber, vinyl, and wood.**

Keep it clean

Once you're fortified your home, the next step is to deny pests shelter, food, and water they need. Do you have holes in your floorboards? Replace the flooring before ants or termites infest the rotting wood. Stacks of old newspapers piled up in your





garage? Recycle them before rats shred them and use the scraps to build their nests.

If you're cutting corners with your housecleaning, you have more to fear than gossipy neighbors. Pests will notice—and move in. So mop up spills, and sweep and vacuum regularly. Wash dishes and take out the garbage daily, and keep trash cans free of food residue. Store ripe fruit in the refrigerator, and never leave leftovers uncovered overnight. Wash your pet's bedding once a week to ward off flea infestations. "Also fix leaking pipes and faucets," Rotkin-Ellman says. "Spots that are regularly damp can provide places for pests to breed."

Pick your battles

Nobody wants to share their turf with bugs and vermin. But IPM asks us to think twice before killing them dead. Because bees pollinate plants that account for 30 percent of the crops we consume—and because their population has plummeted 50 percent over the past 40 years, likely due in part to pesticide overuse—many IPM advocates recommend leaving bees alone if you discover them nesting near your home. Many are not aggressive and only sting when handled or stepped on.

As for other pests, IPM maintains that whether you call the exterminator should hinge on the nature of the beast. Silverfish, for example, may be annoying, but don't present health risks. "Insects that do—and that you want to deal with—include disease-carrying mice, cockroaches, fleas, and ticks," says Rotkin-Ellman.

Go green

When you do roll up your sleeves to kill persistent pests, IPM recommends the old-school methods as your first weapons of choice. Reach for the flyswatter. Sweep up individual bugs and nests and cut off their air supply by placing them in sealed vacuum bags. Use mousetraps, flytraps, jar traps, pheromone traps, and other nontoxic bait.

Dust cracks and crevices with boric acid powder, which will slowly poison crawling insects but is less toxic to humans than pesticides are. Also consider scrubbing affected areas with insecticidal or fatty-acid soaps, which are safe for people unless accidentally ingested. (Though less toxic, these options should still be handled carefully and kept away from kids and pets.)

IPM approaches can be tailored to particular pests. Ants nesting in your potted plants, for example? Douse the plants with water for 20 minutes on the porch, and the ants should crawl right out. Pest-specific instructions are available from the Northwest Center for Alternatives to Pesticides.

Go for the big guns

If rodents or insects still persist, pesticides should be your last resort. IPM advocates using these chemicals sparingly, with spot treatments limited to affected areas. Use pesticides with lowest toxicity—(labeled IV on a scale of I to IV). Avoid chemicals that are known to be carcinogens, neurotoxins, and endocrine disruptors, which can potentially wreak havoc on human hormones. Never exceed the application quantity indicated on the label, and take all recommended precautions, such as wearing gloves and masks. Once you've sealed and cleaned your home thoroughly, responsible and restrained pesticide use should finally end the unwelcome infestation.

And if all else fails, hire a pro

Just make sure any extermination service you hire:

- is licensed in your state
 - is certified by reputable programs such as *EcoWise, GreenPro, and Green Shield
 - supplies a list of references
 - provides a written report of findings, recommended treatments, and costs
 - offers a written guarantee of service
 - explains the causes and remedies of your pest problems
 - offers a sustainable, long-term strategy for preventing further outbreaks
- schedules a follow-up visit to evaluate the success of IPM



WSU Lewis County Extension presents



“All About Goats”



**Join us on Saturdays,
October 28 & November 4, 2017**

8:30 am to 4 pm

(doors open at 8am)

Location: Historic Courthouse

351 NW North Street (west entrance), Chehalis, Lewis County

Come learn about goat care, feeding, housing and the benefits of being a goat owner. Pack or dairy, or companion, it's 'All About Goats'

To register, visit www.brownpapertickets.com....or call
360-740-1212 for more information.



Autumn Health and Safety Tips to help you and your family stay safe and healthy.

Keep your kids safe and healthy.

Get involved with your kids' activities at home and at school to help ensure they are safe and healthy.

Take steps to prevent the flu.

To protect against the flu, get vaccinated yearly wash your hands often, cover coughs/sneezes; stay home if sick.



Test and replace batteries.

Check or replace carbon monoxide batteries twice a year: when you change the time on your clocks each spring and fall. Replace smoke alarm alkaline batteries at least once a year. Test alarms every month to ensure they work properly.



Keep food safe.

Food is center stage during the holidays. Be sure to keep it safe by following basic food safety steps. Clean hands and surfaces often. Separate foods to avoid cross-contamination. Cook to proper temperatures. Chill promptly.

Be prepared for cold weather.

Exposure to cold temperatures can cause health problems. Infants and the elderly are particularly at risk, but anyone can be affected. Know how to prevent health problems and what to do if a cold-weather emergency arises. Remember that using space heaters and fireplaces can increase the risk of household fires and carbon monoxide poisoning.

Wash your hands.

Keeping hands clean is a most important steps you can take to avoid getting sick and spreading germs. It's best to wash your hands with soap and clean running water for 20 seconds. If that's not possible, use alcohol-based hand rubs.

Source: <https://www.cdc.gov/family/autumn/index.htm>

Remember to wash our hands:



After using
the toilet



After sneezing
or coughing



After playing
with pets



After sports or
playing outside



Before eating



NATIONAL OCTOBER 1 - 7, 2017 4-H WEEK

The 2017-2018 year of 4-H open enrollments for youth and adult leaders starts

Thursday, October 5, 2017

4-H empowers young people with the skills to lead for a lifetime. It's a research-based experience that includes a mentor, a hands-on project, and a meaningful leadership opportunity.



Are you looking for a 4-H club or information on how to become a 4-H leader?

Contact Pam Watson at
360-740-1220

For information on upcoming
4-H Orientations or a
4-H open house

JOIN | THE REVOLUTION OF RESPONSIBILITY 

Harvest Guide for Cool Weather Vegetables

Harvest your cool weather vegetables at the peak of perfection using these guidelines.

Fall gardening gets you outdoors during the months of short, cold days, and it gives you a fresh, healthy harvest filled with green goodies.



Broccoli

When you see a head beginning to form in the center of the plant, check its growth every day. Ideally, you harvest broccoli while the tiny buds are tightly closed. If the buds begin to swell or show yellow (the flower petals), cut the head from the stem right away, no matter how small it is, because the opening buds have a mealy texture. After cutting the main head, leave the plant to grow bite-sized side shoots in the axils of the leaves. Don't be surprised if your broccoli head is smaller than those in the grocery store; they are grown in ideal conditions. Heads keep for about a week in the fridge.

Brussels Sprouts

Brussels sprouts are ready to harvest when the tiny heads are firm and about an inch in diameter. Remove by twisting them from the central stem.



Sprouts first form at the bottom of the plant and continue forming toward the top for several weeks. You can trick the sprouts to mature all at once by cutting off the top of the plant about six weeks before you want to harvest. Full-grown sprouts keep well on the plant in cold weather, making them a great winter harvest item for gardeners in the South (planted in fall). In cold climates, gardeners often bury Brussels sprout plants up to their tops in hay or leaves in late fall, then pull off the little sprouts as needed through winter. Try them roasted!

Cabbage

Cabbage is ready to harvest when the head forms. Some varieties hold well in the garden for weeks, while others need to be cut soon after the heads are firm. Test the heads by squeezing them to see if they are solid. A head can look like it is ready from the outside, but still be flimsy and loose-leafed on the inside. Cut the head from the base of the plant. Cabbage keeps for several weeks in the fridge.

Cauliflower

Check cauliflower every day as it approaches maturity. Leave the head to grow as long as it is small and very compact, until it reaches about 6 to 8 inches in diameter. However, if the head begins to open up, cut it from the plant at the base of the head, no matter how small it is, because it will only get looser and lose its characteristic texture. The head should keep in the refrigerator for at least two weeks. Cauliflower is a challenge to grow in many parts of the country because it is sensitive to temperature fluctuations. Lots of folks are using grated cauliflower in place of mashed potatoes!

Lettuce

Lettuce leaves are ready to harvest at just about any size. Pick leaf lettuce by breaking leaves one at a time from the outside of the plant; leave the bud to grow more leaves. You'll need to wait on Romaine lettuce to form its characteristic mid-rib before harvest; if left to grow to full size, it will form a loose, head-like clump of leaves.

Bibb types form a loose head that is ready anytime, but if you want the classic Bibb rosette, you will need to wait until the lettuce is nearly full grown and cut it at the soil line. The same is true for head lettuce; however, in climates where head lettuce doesn't make a firm head, you can harvest the leaves as they get large enough to eat.

Lettuce that matures in cool weather is the sweetest. As the weather warms, plants will 'bolt' their stems will lengthen and then flower and set seeds. By the time they begin to stretch and send out a seed stalk, the leaves are often bitter. When this happens, harvest all your lettuce at once and store it in the refrigerator.



Onions

When onion tops begin to yellow, it is a sign that they are just about mature. At this time, stop watering and let the bulb tops fall over and dry. Then the onions are fully mature and ready to be pulled up. Don't be tempted to pull the onions too early, because the thick, moist neck becomes a breeding ground for rot.

Snap Peas

You can harvest sugar snap peas just about any time. The peas and the pods are very sweet, making these one of the best peas ever. They are so delicious whole that the harvest may never make it to the kitchen.

If you pick the pods while they are still young and flat, you can use them in stir-fry like Chinese edible pod peas. Or you can wait until the peas inside fill out and eat the pods whole, or shell them to eat the peas inside just as you do English peas.



Spinach

Spinach leaves are ready to harvest just about anytime that they are big enough to eat. You can pluck outer leaves one at a time, leaving the small center leaves in place to grow. Or you can wait until the plants are well filled out and pull up the entire plant, cutting away the roots. In spring, keep plants in the ground until they begin to stretch, or go to seed.

In fall, leave the plants in place. In mild climates, they produce all winter. In cold climates, some gardeners raise plants in a cold frame or cover them with hay and leave

them to produce a very early spring harvest.

Sources:

pubs.wsu.edu (Home Garden Series)

bonnieplants.com/library/harvest-guide-for-cool-weather-vegetables

Primroses and pansies: Cool Weather Cheer

There is a chill in the air recently that let's us know that fall is on the way. To continue the season of color think about primroses and pansies, they are cool weather plants that provide spots of colorful cheer. Check out your local nurseries for a variety of colors. They are suited for in ground or container planting.



Jerky and Food Safety



When raw meat or poultry is dehydrated at home — either in a warm oven or a food dehydrator, pathogenic bacteria are likely to survive the dry heat of a warm oven and especially the 130 to 140 °F of a food dehydrator. Here is the scientific background behind drying food and the safest procedure to follow when making homemade jerky.

What is jerky?

This product is a nutrient-dense meat that has been made lightweight by drying. A pound of meat or poultry weighs about four ounces after being made into jerky. Because most of the moisture is removed, it is shelf stable — can be stored without refrigeration — making it a handy food for backpackers and others who don't have access to refrigerators.

Jerky is a food known at least since ancient Egypt. Humans made jerky from animal meat such as bear, buffalo, or whales. North American Indians mixed ground dried meat with dried fruit or suet to make "pemmican." "Biltong" is dried meat or game used in many African countries. Our word "jerky" came from the Spanish word "charque."

How can drying meat make it safe?

Drying is the world's oldest and most common method of food preservation. Canning technology is less than 200 years old and freezing became practical only during this century when electricity became more and more available to people. Drying technology is both simple and readily available to most of the world's culture.

The scientific principal of preserving food by drying is that by removing moisture, enzymes cannot efficiently contact or react with the food. Whether these enzymes are bacterial, fungal, or naturally occurring autolytic enzymes from the raw food, preventing this enzymatic action preserves the food from biological action.



What are the types of food drying?

There are several types of food drying. Two types of natural drying — sun drying and "adiabatic" (shade) drying — occur in open air. Adiabatic drying occurs without heat. Solar drying sometimes takes place in a special container that catches and captures the sun's heat. These types of drying are used mainly for fruits such as apricots, tomatoes, and grapes (to make raisins). Sun drying is not recommended for making meat jerky due to a lack of a steady heat source and the potential for contamination from animals, insects, dust, and bacteria.

Drying from an artificial heat source is done by placing food in either a warm oven or a food dehydrator. The main components of an electric food dehydrator include: a source of heat, air flow to circulate the dry air, trays to hold the food during the drying process, and mesh or leather sheets to dry certain types of foods.

Why is temperature important when making jerky? Illnesses due to *Salmonella* and *E. coli* O157:H7 from home-made jerky raise questions about the safety of traditional drying methods for making beef and venison jerky. The USDA Meat and Poultry Hotline's current recommendation for making jerky safely is to heat meat to 160 °F and poultry to 165 °F before the dehydrating process. This step assures that any bacteria present will be destroyed by wet heat. But most dehydrator instructions do not include this step, and a dehydrator may not reach temperatures high enough to heat meat to 160 °F or 165 °F.

After heating to 160 °F or 165 °F, maintaining a constant dehydrator temperature of 130 to 140 °F during the drying

process is important because the process must be fast enough to dry food before it spoils and it must remove enough water that microorganisms are unable to grow.

Why is it a food safety concern to dry meat without first heating it to 160 °F?

The danger in dehydrating meat and poultry without cooking it to a safe temperature first is that the appliance will not heat the meat to 160 °F and poultry to 165 °F — temperatures at which bacteria are destroyed — before the dehydrating process. After drying, bacteria become much more heat resistant.

Within a dehydrator or low-temperature oven, evaporating moisture absorbs most of the heat. Thus, the meat itself does not begin to rise in temperature until most of the moisture has evaporated. Therefore, when the dried meat temperature finally begins to rise, the bacteria have become more heat resistant and are more likely to survive. If these surviving bacteria are pathogenic, they can cause foodborne illness to those consuming the jerky.

What research findings exist on the safety of jerky?

"Effects of Preparation Methods on the Microbiological Safety of Home-Dried Meat Jerky" was published in the *Journal of Food Protection*. The authors are from the University of Georgia (Department of Foods and Nutrition, and Department of Food Science and Technology) and from Colorado State University (Department of Food Science and Department of Animal Sciences).

Marinating meat doesn't make raw meat safe. "Marination alone did not result in significant reduction of the pathogen compared with whole beef slices that were not marinated," concluded the study.

In the jerky studies, some samples showed total bacterial destruction and other samples showed some bacterial survival — especially the jerky made with ground beef. Further experiments with lab-inoculated venison showed that pathogenic *E. coli* could survive drying times of up to 10 hours and temperatures of up to 145 °F.

Another study by the University of Georgia was published in the *Journal of Food Protection* in 1998. The authors analyzed ground beef jerky made with a commercial beef jerky spice mixture with and without a curing mix containing salt and sodium nitrite.

Half of the ground beef was inoculated with *E. coli* O157:H7 before making it into jerky strips and dehydrating it. The authors found that in both the heated and unheated samples, the jerky made with the curing mix had greater destruction of bacteria than jerky made without it. The jerky made with the mix and heated before dehydrating had the highest destruction rate of bacteria.

They concluded, "For ground beef jerky prepared at home, safety concerns related to *E. coli* O157:H7 are minimized if the meat is precooked to 160 °F prior to drying."



What are the USDA Meat and Poultry Hotline's recommendations for making homemade jerky?

Safe handling and preparation methods must always be used, including:

- Always wash hands thoroughly with soap and water before and after working with meat products.
- Use clean equipment and utensils.
- Keep meat and poultry refrigerated at 40°F or slightly below; use or freeze ground beef and poultry within 2 days; whole red meats, within 3 to 5 days.
- Defrost frozen meat in the refrigerator, not on the kitchen counter.
- Marinate (to tenderize and flavor) meat in the refrigerator. Don't save marinade to re-use.
- Steam or roast meat to 160°F, poultry to 165°F, as measured with a food thermometer before dehydrating it.
- Dry meats in a food dehydrator that has an adjustable temperature dial and will maintain a temperature of at least 130 to 140°F throughout the drying process.

Are there special considerations for wild game jerky?

Yes, there are other special considerations when making homemade jerky from venison or other wild game. According to the authors, "Venison can be heavily contaminated with fecal bacteria — the degree varying with the hunter's skill, wound location, and other factors. While fresh beef is usually rapidly chilled, deer carcasses are

typically held at ambient temperatures, potentially allowing bacteria multiplication."

Is commercially made jerky safe?

Yes, the process is monitored by USDA's Food Safety and Inspection Service. Products may be cured or uncured, dried, smoked or unsmoked, air or oven dried. The following terms may be on processed jerky products:

- "Beef Jerky" - produced from a single piece of beef.
- "Beef Jerky Chunked and Formed" - produced from chunks of meat that are molded and formed, then cut into strips.
- "Beef Jerky Ground and Formed or Chopped and Formed" - produced from ground or chopped meat, molded and cut into strips. Beef Jerky containing binders or extenders must show true product name (e.g., "Beef and Soy Protein Concentrate Jerky, Ground and Formed").
- "Species (or Kind) Jerky Sausage" - the product has been chopped and may be dried at any stage of the process, and it is stuffed into casings.

What is the safe storage time for jerky?

Commercially packaged jerky can be kept 12 months; home-dried jerky can be stored 1 to 2 months.

Source: https://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/meat-preparation/jerky-and-food-safety/ct_index



SNAP is the Supplemental Nutrition Assistance Program (formerly known as Food Stamps). It is part of the U.S. domestic hunger safety net and provides economic benefits to eligible, low-income individuals and families for food purchases. **SNAP-Ed** is the nutrition promotion and obesity prevention component of **SNAP**.

The Supplemental Nutrition Assistance Program Education (SNAP-Ed) works with local agencies to help people choose healthy foods and active lifestyles.

WSU Lewis County Extension is pleased to have **Julie Pirtle on our team** as our **SNAP-Ed** Nutrition Educator. We are excited to have her here to meet the needs of our community. Julie is providing nutrition, gardening, and cooking classes for children and families at several partner sites throughout the community.

If you have questions for Julie contact her at the WSU Extension office at 360-740-2793.

Julie.Pirtle@lewiscountywa.gov



Fall Small Farm Workshop Series 2017



The WSU Lewis County Extension will host a workshop series relative to today's small farm agribusiness, farm owners, and operators.

Great information for experienced farmers, or those thinking about getting started.

Monthly workshops held on Thursday evenings 6pm – 7:30pm
\$5 per family at the door (Cash and Check only)

Topics will include:

September 28:

How Ag Weather Net Works

October 26:

Mud Management with

Gary Fredricks, Cowlitz County Extension

November 30:

FSME (Farm Safety Modernization Act) and Your Farm

Location: Historic Courthouse

351 NW North Street (west entrance)

Chehalis, Lewis County

Pre-registration is requested to assure handouts, Call 360-740-1212 Walk-ins Welcome too.



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WSU LEWIS COUNTY EXTENSION MASTER GARDENER PROGRAM

MASTER GARDENER TRAINING

YEAR ROUND ENROLLMENT IS NOW AVAILABLE

Sign Up NOW

WSU Lewis County Master Gardener Training Program

Applications are available at the
WSU Lewis County Extension
Office

WSU Lewis County Extension
351 NW North St.
Chehalis, WA 98532
Office hours: 9:00 a.m. to 3:00 p.m.
Monday - Thurs.

For more information on the WSU,
Lewis County, Master Gardeners
program, contact:

Art Fuller
Phone: (360) 740-1216

<http://lewis-mg-mrc.org>
art.fuller@lewiscountywa.gov

What is the time commitment required for training and volunteer activities?

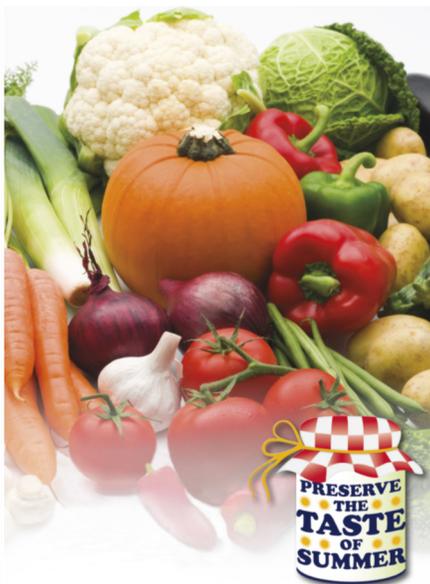
- Attend orientation prior to beginning of training with the Master Gardener Coordinator.
- Training is held over a 12-month period with once a month, full-day sessions on the 3rd Tuesday of every month and **can be started any month throughout the year.** The training session is in a classroom environment, Incorporates hands-on practice of the assigned study material and will include field trips. Trainees will spend their own time reviewing the on-line training material prior to class.
- Trainees will spend (7) three hour shifts for a total of 21 hours throughout the year at the Plant and Insect Clinic with a veteran Master Gardener.
- Each month from April through October, trainees will work in a demonstration garden with veteran Master Gardeners for a total of 20 hours.

Hosted by WSU Lewis County 4-H Food Resource Leaders



PRESERVE THE TASTE OF SUMMER

is a comprehensive food preservation program that includes eight lessons. It is a great opportunity for anyone age 18 years or older who is interested in learning how to safely preserve foods.



WASHINGTON STATE UNIVERSITY
LEWIS COUNTY EXTENSION

Have you registered for, or completed the

“Preserve the taste of summer” Class Offered by WSU?

<http://preservesummer.cahnrs.wsu.edu>

If so, we have some hands on Classes scheduled for the coming year. Join us on any or all of the dates below. Cost of Classes will vary and be determined as class details are finalized. We hope to see you there.

[*2017 Class Schedule*](#)

For more information or to register contact Kim Weiland 740-1212 or kimberly.weiland@lewiscountywa.gov

What is 4-H?

4-H empowers young people with the skills to lead for a lifetime. It’s a research-based experience that includes a mentor, a hands-on project, and a meaningful leadership opportunity.

4-H reaches almost six million young people through our community of 100 public universities. Programs are delivered by 3,500 **4-H** professionals and 500,000 volunteers. Young people experience **4-H** through school and community clubs, in-school and after-school programs and **4-H** camps.

Based on their interests and guided by adult mentors, youth develop their own pathway in **4-H**. They select from a broad menu of local **4-H** programs. There are hands-on, learn-by-doing, opportunities for everyone.

Call or stop by today!

For more information contact:
Pam Watson 4-H Youth Development Agent
360-740-1220
WSU Extension
351 NW North Street, Chehalis WA 98532



What's Cookin'?

Fun (and different than a “plain old regular sandwich”) Lunchbox Ideas



Ham Roll-Ups!

Spread one slice of deli ham with 1 tablespoon cream cheese. Then have fun—add fruit, veggies or other ingredients of your choice to jazz it up and add nutritional value, color, flavor and texture variety. Pictured with “julienne” green onions. Try sliced or chopped fresh mushrooms, grated or slivered jicama or carrots, thinly sliced cucumber, tomatoes (yummy but maybe “drippy”), basil, slivered dried apricots, dry cranberries, use your imagination.

Pizza Quesadilla

- ◆ Spray a non-stick skillet with cooking spray and preheat.
- ◆ When fairly hot, place 1 flour tortilla in the pan.
- ◆ Spread on a few tablespoons of spaghetti or pizza sauce.
- ◆ Then add a layer of Pepperoni (and anything else you like).
- ◆ Top with shredded cheese (Monterey Jack or whatever is your favorite).
- ◆ Top it with 2nd flour tortilla.
- ◆ Let it brown then flip it over. You can spray on a little more cooking spray, but you usually don't need to.
- ◆ After both sides are browned and the insides are hot and melted take the "pizzas" out to cool.
- ◆ Once cooled slice in 1/4 like a pizza and wrap snugly with plastic wrap or aluminum foil.

Source: <http://www.food.com/recipe/lunchbox-pizza-quesadilla-385190>



Peanut Butter and Jelly “Sushi Rolls”

- ◆ Remove crusts from bread. With a rolling pin or large soup can, completely flatten bread.
- ◆ Spread 1 tablespoon of peanut butter and 1 tablespoon of fruit spread on each slice of bread.
- ◆ Roll each slice into a tight spiral. Cut each spiral into 4 pieces. Refrigerate first to make slicing easier.

Source: www.smuckers.com/recipes/pbj-sushi-rolls-3004

Banana Oatmeal Sponge Cookies

- 1 cup mashed ripe banana
- 2 cups oatmeal
- 1/2 teaspoon vanilla
- 1/4 cup applesauce
- 1/3 cup raisins
- 1/2 teaspoon cinnamon

- ◆ Heat oven to 350 degrees.
- ◆ Mix all ingredients until moist.
- ◆ (I use old-fashioned rolled oats, but imagine you could use quick-cook oats instead).
- ◆ Mixture will be goeey and sticky. That is normal.
- ◆ Drop by tablespoonful onto ungreased baking sheet.
- ◆ Flatten to desired thickness and shape, as cookies WILL NOT spread on baking.
- ◆ Bake at 350 degrees for 15 minutes. Remove to wire rack to cool.



Source: <http://www.food.com/recipe/healthy-banana-oatmeal-sponge-cookies-for-kids-97312>

Is Powdered Peanut Butter Good for You?

It's a trendy food to add to smoothies and more. Powdered peanut butter is made from roasted peanuts that have been pressed to remove most of the oil and then ground into a fine powder. Some brands contain sugar and salt. With most of the fat gone you're left with protein and fiber. A tablespoon has about 25 calories, 1 gram of fat, 3 to 4 grams of protein, and 1 gram of fiber. Regular peanut butter has the same protein and fiber counts, but has 96 calories and 8 grams of fat per tablespoon.

The fat in regular peanut butter is mostly the heart-healthy monounsaturated kind, so the only nutritional advantage of powdered peanut butter is its much lower calorie count. If you like to spread peanut butter on toast or an apple, you're probably better off with the real thing. Reconstituting powdered peanut butter with water to make a bread spread won't have the creamy texture of regular peanut butter. Where powdered peanut butter comes in handy is in adding peanut flavor and some protein to baked goods, oatmeal, smoothies, and yogurt.

You give up the creaminess of peanut butter, so you want to be sure your powdered peanut butter packs the most flavor. Consumer reports tasted three popular brands. Here is how they stack up:

Jif Peanut Powder. The clear winner, had a sweet roasted peanut taste and was only slightly bitter. Contains no salt or sugar, but the package tells you how much to add, if you desire. When mixed with water, the texture is smooth and soft.

PB2 Powdered Peanut Butter. Some peanut taste, but with a beany undertone that detracts from the flavor. Slightly salty, sweet, and bitter. Contains added salt and sugar. Smooth and soft texture.

Peanut Butter & Co. Mighty Nut Powdered Peanut Butter Original. Tastes distinctly bitter and slightly sweet and salty. Contains added salt and sugar. Smooth, soft texture.



Source: <https://www.consumerreports.org/healthy-snacks/is-powdered-peanut-butter-good-for-you/>

Asian Peanut Noodles

Cook 1/4 lb. soba noodles according to package directions. While the noodles cook, combine 1/2 cup vegetable stock, 2 Tbs. peanut butter powder, 1 tsp. sriracha, 1 Tbsp. honey, 1 Tbs. soy sauce and 1 minced garlic clove in a small bowl. Whisk until combined. Heat 2 Tbsp. vegetable oil in a large skillet over medium-high heat. Add 1 cup of broccoli florets and cook for 3-4 minutes. Add 1 spiralized (or thinly sliced) zucchini and 1 spiralized (or grated) carrot and cook for another 1-2 minutes. Add sauce and soba noodles and cook for 1-2 more minutes.

Per serving: 120 calories, 5g fat, 4g protein, 15g carbs, 2g fiber, 0mg cholesterol, 503mg sodium



Peanut Butter Banana Muffins

Preheat oven to 350°F. In a food processor, combine 2 bananas, 1 egg, 1/4 cup chopped dates and 1/2 cup milk. Process until smooth. In a separate large bowl, combine 2/3 cup all-purpose flour, 1/3 cup peanut butter powder, 1/4 tsp. baking soda, and 1/4 tsp. cinnamon. Add the liquid mixture to the dry ingredients and stir until evenly combined. Spray a 6-muffin pan with cooking spray and divide the mixture evenly into the tin. Bake for 15 minutes.

Per serving: 165 calories, 3g fat, 8g protein, 31g carbs, 3g fiber, 40mg cholesterol, 99mg sodium

5 Ways to use Powdered PB

1. Sprinkle over air-popped popcorn for a healthy movie night treat.
2. Mix a spoonful with Greek yogurt and a bit of honey for a perfect dip for apple slices.
3. Swap with 1/3 of the flour in your go-to pancake recipe for a nutty breakfast.
4. Blend a scoop with 3 frozen bananas for a tasty ice cream alternative.
5. Spruce up a weeknight chicken dinner by adding a spoonful to your regular breading mix.

Source: Parade Magazine; <https://www.consumerreports.org/healthy-snacks/is-powdered-peanut-butter-good-for-you/>

Safe School Lunch Boxes



To keep the "lunch box bug" called food poisoning out of children's school, or your work, lunches follow these tips from the Academy of Nutrition and Dietetics.

Wash Hands Often

- Be sure to wash hands before, during and after preparing children's lunches.
- Make sure the counter surface is clean and dry when preparing lunch to prevent germs from spreading to the food. Don't forget to make sure the lunch box is clean, too.
- Teach children to wash their hands before digging into lunch. For extra protection, pack moist towelettes in the lunch box or bag.

Separate Raw Meats, Seafood, and Poultry from Ready-to-Eat Foods

- At home, store fruits, vegetables and cooked and ready-to-eat meats for kids' lunches separately from raw meats.
- To help prevent cross-contamination, keep a supply of shelf-stable foods that don't require much preparation or refrigeration such as crackers, fresh fruits, packaged puddings and canned fruits or meats.

Cook to Proper Temperatures

- Pack hot foods like soup and chili in well-insulated, tightly sealed containers until ready to eat.
- Instruct older children how to microwave a meal carefully according to package directions so that it reaches the proper internal temperature.

Refrigerate Promptly Below 40°F

- Invest in an insulated lunch box or use double paper bags.
- Find out if students have access to a refrigerator at school and instruct them to put lunches in the refrigerator as soon as they get to school. (Make sure children's lunches are clearly identified.)
- If sending perishable foods for lunch (such as hard-boiled eggs, milk, yogurt, cheese or a sandwich with meat, chicken, turkey or tuna), include a frozen icepack to help keep them cold until lunchtime. A frozen individual juice box can help serve as a cold pack.
- If packing a sandwich the night before, keep it in the refrigerator at below 40°F until your child leaves for school.



Instruct your child to throw away all perishable leftovers after lunch.

2017 Coming Events

Sept 22	Preserving Meat, Game, Seafood	Borst Park Kitchen #2
Sept 28	All About Goats	WSU Meeting Room
Sept 16	Seed Saving	Borst Demo Garden
Oct 4	Reclaim/Recycle/Repair-Wear	Borst Park Kitchen #1
Oct 7	Gardening for Everyone Classes	Centralia College-WA Hall
Oct 13	Fall Comfort Foods	Borst Park Kitchen #2
Oct 19	Famacha Testing for Goats	WSU Meeting Room
Nov 11	Digging, Dividing, Storing Dahlias	Borst Demo Garden
Nov 17	Gifts From Your Kitchen	Borst Park Kitchen #2
Dec 2	Green Gift Gala	Timberland Library, Chehalis

For more information and details about upcoming events, visit our webpage at lewis.wsu.edu or [Facebook](#)



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