



Northeast Extension Connection

Range Tour— July 12

By Lindsay Taylor and Gene Gade

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Rotational grazing and its impact on animal health and performance, grass and weed identification and new technology for monitoring rangeland will be featured on the Tri-County Extension Range Management Tour Thursday, July 12. The tour will begin at the Moorcroft I-90 Highway Rest Area at 11 a.m. and will conclude about 4 p.m. Lunch will be provided and there is no charge. RSVP to an Extension office is requested to allow planning for lunch and transportation. **(Campbell Co. - 682-7281; Crook Co. - 283-1192; Weston Co.- 746-3531)**

Lunch and a few introductory comments will be made at the Moorcroft Rest Area. First stop on the tour will be at the Matt Avery Ranch on the Gray Road where participants will do some identification of weeds and grasses and learn some basic techniques for monitoring the health and utilization of rangeland. Digital photos will be taken at this site and the photos will be analyzed later in the tour for species composition, % cover and general range health using a new software developed by the Bureau of Land Management.

The tour will then proceed to the Warbonnet Ranch southwest of Moorcroft, owned by Richard, Betty and Thane Gray. The Warbonnet has achieved regional fame and numerous awards for its holistic approach to ranch management. The ranch is a showcase of intensive, time-control grazing and has implemented improvements including numerous

fence and water developments, mechanical renovation, seeding and so on.

Extension Educator, Lindsay Taylor, Gene Gade and the Gray family will present information on the relationships between intensive grazing and animal health and performance. The Gray's have been able to substantially increase their stocking rate over time through rotational grazing and other management strategies.

The tour's final stop will be Moorcroft High School where they will see a demonstration of the new BLM range monitoring software called "Sample Point." Those who wish to will even be able to try out the technology using computers at the school to analyze digital photos provided or taken at the Avery or Gray Ranches.

Public Land Grazing Has Influences Well Beyond The Agency Boundaries

By Gene Gade—University of Wyoming Extension Educator—Northeast Area

Debates and legal conflicts related to grazing on public lands have been raging for at least 35 years and show no sign of abating. Most of the arguments have been about the direct affects of grazing on the plant-animal communities administered by the U.S. Forest Service and the Bureau of Land Management. The focal points are usually where livestock use interacts most strongly with other resource uses...ex. riparian areas that are also important for human recreation, critical wildlife habitat, protection of downstream water supplies, etc. However, public land grazing permits are often essential to the economic viability of many ranches and thus have implications for entire regional economies and the maintenance of open space and wildlife habitat on private lands.

A Proposed Permit Buyout

Recently, a coalition of anti-grazing organizations called The National Public Lands Grazing Campaign (NPLGC) has made a proposal that the federal government “provide compensation to ranchers who voluntarily relinquish a federal grazing permit or lease on public lands where conflicts with other multiple uses render livestock grazing impractical. The bill would pay federal grazing permittees/lessees \$175 per animal unit month to permanently retire their permit or lease.”

Proponents of this proposed legislation emphasize that: 1) participation is voluntary, 2) it could improve the health of other wildland resources, 3) it could reduce the level of conflict and litigation, 4) it’s cost effective to the public compared to the status quo.

According to NPLGC, most ranchers who graze public lands pay \$1.79 per animal unit month (AUM) for the privilege. Only a fraction of these fees return to the federal treasury to offset the \$200 million (or \$10.46/AUM per year) that it costs the government to manage these grazing lands and permits. When federal permits are sold, the average capital value of an AUM is \$35-\$75. NPLGC contends that at \$175 per AUM, the simple payback to taxpayers would be 17 years. They say that this is much more cost effective for tax payers than continuing to “subsidize” public lands grazing indefinitely.

Other Possible Consequences of a Buyout

Opponents of the concept say that the proposed buyout is likely to accelerate the ongoing loss and associated fragmentation of “open space” as permittees take the buyout and then sell their private land (base property). The argument is that the economic viability of many ranches will be reduced without grazing on public lands. With market values of rural lands for subdivisions increasing rapidly, the pressure to sell could be insurmountable for many ranchers.

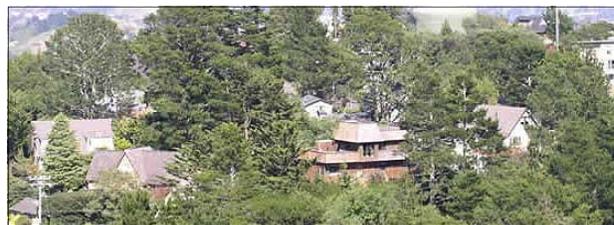
Recently, the USFS and BLM funded a study to evaluate the potential outcomes of a buyout program. Mark Steinbach, a private lands wildlife biologist with

the Texas Parks and Wildlife Department and Jack Ward Thomas, a professor in the College of Forestry and Conservation at the University of Montana, completed and published the study. They analyzed the probable outcomes of a buyout in four main categories:

Ranch Viability—The vast majority of ranches using public land are highly dependent on them for economic viability. Permittees who no longer have use of public land will either have to buy or lease additional private land to survive in business, or they could sell or lease their land to other ranchers in the same situation.

Proponents of the buyout note that the revenue from selling a public land grazing lease could be used to acquire additional private land and/or to pay off debt.. However, these options are weakened by the high and increasing market value of private property for purposes other than ranching/agricultural use.

Land fragmentation is already accelerating in the western states. Private lands are generally more biologically productive. They also provide open space and wildlife habitat-particularly winter range as well as hydrologic benefits. The most likely scenario is that many small ranchers that no longer had public land permits would take the option of selling land for subdivision and/or “hobby ranches.”



Development on the Wildland-Urban Interface has many possible consequences

Wildlife Consequences—Summer range for most of the large wild herbivores is predominantly on higher elevation land, often administered by the US Forest

Grazing Buyout Continued—

Service in the western US. However, most of the lower elevation habitat that serves as winter range is privately owned. Ranchers see themselves as subsidizing a “public good” when deer, elk, moose, etc. eat hay, use water, consume supplemental feeds, cause damage to fences and, sometimes, spread diseases to domestic livestock. However, any increased fragmentation of ranch land is likely to have negative impacts on wildlife, because suburbanites are even less tolerant of wildlife damage. Also, in many areas wildlife is dependent upon water sources developed by ranchers for their livestock. Loss of ranches will mean the end of some of these water developments and, therefore, will probably diminish some wildlife populations.



Administrative Consequences—Subdivisions that border on public land (the so-called “wildland-urban interface or WUI) present significant management issues to federal agencies including fire danger, maintenance of water resources, responsibility for fencing, the lost potential of grazing as a vegetation management tool, etc. The wildfire issue is enormous and growing. In many areas, grazing consumes much of the fine fuels that carry fires, so fire danger may well increase further. Currently, permittees provide maintenance of many



fences and water developments on public land. This maintenance would be lost if permits are sold, which could result in negative financial and other consequences to the agencies and/or adjacent private landowners at the WUI.

Cultural and Community Impacts—Proponents of the buyout say that ranching provides relatively few jobs, often with low wages compared with other parts of the western economy. Some ranching opponents have even said that ranches are more dependent on rural communities than the other way around. However, a number of economic studies over the years have documented that the value of a public land AUM is indeed felt on and very important to “main street businesses” in many western towns.

Recently University of Wyoming economists did an

analysis of the impact of public land grazing as part of the forest plan for Bridger-Teton National Forest in western Wyoming. Here are some findings reported: The average value of agricultural production on a sheep allotment was \$41.42 per grazing AUM. Due to linkages between ranching and the rest of the region’s economy, the economic impact of the production of each AUM was estimated to be \$88.46. Analysis of ranches in western Wyoming found that an AUM of grazing generates and estimated \$57.99 of livestock production. This reflects that the Forest Service AUM’s are a seasonal, but essential part of a much larger over-all grazing system. Under this scenario, the total economic impact of the production associated with a USFS AUM is \$123.85.

The study also found that one job is generated for every 720 AUMs...about \$37.77 worth of labor for every AUM.

Yet another perspective, the Western Wyoming USFS Grazing Model, suggests that an AUM actually represents an estimated \$126.33 of livestock production.

Under this scenario, the total economic impact of the production associated with one USFS AUM throughout the region’s economy is \$269.81. As a result of this economic activity it is estimated that \$82.29 of labor earnings are generated per AUM.

According to this model, the 190,014 AUMs on the Bridger-Teton Forest resulted in \$24 million of production, \$51.3 million in total economic activity, \$15.6 million in labor earnings and 576 jobs.

Ranching is a business, but it is also more than that. There’s a distinctive lifestyle and culture associated with range livestock production that has been integral to the rural West for over a century. It’s hard to quantify “culture” in economic terms, but only a fool would deny that it exists and is valued, often beyond monetary measures, by the people associated with it. To the degree that the West loses ranching, it will, for better or worse, lose the culture that goes with it. Change may be inevitable, but it should not be done without careful consideration of what is lost as well as what is gained. It’s an irony that many of the folks who come to an area for its lifestyle qualities, often end up helping to destroy them.

Sources

Steinbach, Mark and Jack Ward Thomas. 2007.

Potential outcomes and consequences of a proposed grazing permit buyout program. *Rangeland Ecology and Management* 60 (1): January 2007. ppgs. 36-44.

Taylor, David. 2007. Livestock grazing on the Bridger-Teton National Forest. Bridger-Teton Forest Plan.



Water Quality Requirements for Livestock

Lindsay Taylor, UW Extension Educator, Northeast Area

Water is very important and too often overlooked part of livestock diets. Water that is too high in particular minerals, salinity or pollutants can have a big impact on the productivity of livestock, which can have a big impact on producer's profits. Most people are aware that there are certain quality requirements for livestock when it comes to drinking water. However, when you get a water well or ground water source tested and get the results back it can be difficult to make heads or tails of the numbers provided by the lab.

Safe levels of salinity, bacteria, and minerals in livestock drinking water will depend on the type, age, weight, and diet of livestock. But by having water tested and comparing the results to general guidelines, you can determine whether or not there is a reason for concern. Table 1 lists the acceptable ranges of pollutants in livestock drinking water supplies. Table 2 lists the safe upper limits for several substances that can be found in livestock drinking water supplies.

Table 1. Desirable and problem levels of pollutants in livestock drinking water supplies

Substance	Desired range	Problem range
Total bacteria/100ml	<200	>1,000,000
Fecal coliform/100ml	<1	>1 for young animals >10 for older animals
Fecal strep/100ml	<1	>3 for young animals >30 for older animals
pH	6.8 - 7.5	<5.5 or >8.5
Dissolved solids, mg/L	<500	>3,000
Total alkalinity, mg/L	<400	>5,000
Sulfate, mg/L	<250	>2,000
Phosphate, mg/L	<1	not established
Turbidity, Jackson units	<30	not established

**Source: From the Agricultural Water Management Field Handbook, pg. 1-16*

Table 2. Safe upper limits for several substances that may be contained in livestock drinking water supplies.

Substance	Safe upper limit of concentration (ppm)
Aluminum (Al)	5 ppm
Arsenic (As)	0.2 ppm
Boron (B)	5 ppm
Cadmium (Cd)	0.05 ppm
Chromium (Cr)	1 ppm
Cobalt (Co)	1 ppm
Copper (Cu)	0.5 ppm
Fluoride (F)	2 ppm
Lead (Pb)	0.05 ppm
Mercury (Hg)	0.01 ppm
Nitrate + Nitrite	100 ppm
Nitrite	10 ppm
Selenium (Se)	0.05 - 0.10 ppm
Vanadium (V)	0.1 ppm
Zinc (Zn)	24 ppm
Total Dissolved Solids	10,000 ppm
Magnesium + sodium sulfates	5,000 ppm
Alkalinity (carbonate + bicarbonate)	2,000 ppm

**Source: When is Water Good Enough for Livestock?*
Montana State University Extension.

Nitrates can be of particular concern in ruminants if animals are on a diet consisting of a feed with elevated nitrate levels, such as cereal grains produced under stressed conditions. Nitrates can be converted to a toxic form (nitrites) in ruminant animals and to some extent in horses. In these cases the nitrate levels in both the feed and water source must be taken into account. Elevated Nitrate levels are often seen in water derived from runoff, particularly from fields that have been fertilized, or poorly cased, shallow wells. Water from deep wells is much less likely to have significant nitrate concentrations.

If you have a concern about the quality of your livestock drinking water supply, having it tested is a relatively economical way to buy some peace of mind. If you determine that your water falls beyond the guideline levels you can then take the next step in finding out whether the level is a concern based on your livestock species, age, weight, and diet. If you have specific questions regarding livestock water quality, contact your area agriculture/natural resource extension educator. A list of your area educators can be found at http://ces.uwyo.edu/County_Areas.asp.

Small Acreage “Hands On” Work-

Date: July 14, 2007
Time: 8:30 am – 4:00 pm

Lunch Provided

Location:
Gillette College
300 W Sinclair

**Please register by July 10th
by contacting:**

Trisha Tonn or Julie Saur at
(307) 682-7281 or
ag10@ccgov.net

You may also register at the work-
shop from 8:15 a.m. to 9:00 a.m.

Sponsored by: Campbell County Conservation District
Campbell County Cooperative Extension
The Non-point Source Task Force

Possible Topics

Wind Breaks & Tree Establish-
ments

Water Quality: Septic System
Planning

Wyoming Pasture Grass Varieties
& Grazing

Range & Pasture Weed Control

Water Sampling for Water Quality

Pasture Grass Identification

Other **Mini-Workshops**
throughout the summer...

Updates will also be
posted at

[www.barnyardsandbackyards.c
om/events.htm](http://www.barnyardsandbackyards.com/events.htm)

For more information or to

The University of Wyoming and the
United States Department of Agriculture
cooperate. The University is an equal

MANAGING YOUR BOSS

by

Bill Taylor, Area Community Development Educator



The relationship with your boss is probably the most important relationship you have at work. Boss management can stimulate better performance, improve your working life, job satisfaction, and workload.

When we think of managing someone, we usually think of managing our team members or subordinates. However, we should also understand some principles that will enhance our working relationship with our boss.

1. Decisions: If you do not want a “no” or procrastination, give him/her a hand. Your boss has other subordinates, other decisions to make. Thus, if pressed for a decision, it is easiest to say “no.” To avoid the “no” that will ruin yours’ and your team’s enthusiasm, give your boss a hand.

- Remind them of where you left it last time you met;
- Remind them of the objective rather than rushing to the 'what' and 'how';
- Remind them of past problems encountered because a decision was not made;
- Quickly summarize the options considered, your criteria for selecting one option -- the one you are presenting;
- Tell them what you expect from them: simply to inform, to decide jointly, to share the risk, to add one criterion, to re-examine the option;
- Focus on the points where you need their help;
- Be prepared with facts and data for potential disagreements. Help them out with graphics and visuals so that the situation is grasped faster;
- After your meeting, summarize for them the decision in writing to make sure of the understanding;
- And finally, once a decision has been made, your way, their way or no way, do not criticize it externally. You have become the best defender; the best ambassador of what was decided.

2. Manage their time: You may represent only 1% of their problems, don't make it as if it is 100%. Yes, you have preoccupations, problems to solve and issues to tackle. However, while your time is entirely devoted to them, do not expect your boss's time to be also.

- The more simple the problem or issue at hand is, the less time you should have them spend on it: prepare, summarize, and synthesize information and options. Do not confuse your more frequent problems with the most important ones.
- Book him or her for several meetings in advance. Nothing is more frustrating than to have to wait days, weeks or months for that extra new meeting needed in order to finalize a decision or a project.

3. An opinion: If you ask for their opinion, they will always have one. And their opinion may not always be that of a genius or a visionary. However, once given, the opinion becomes a constraint: was it an order? So, if you don't want your boss's opinion then don't ask for it.

- Choose the right moment to avoid procrastination: not only save their time by focusing on big issues, but choose the right moment to do so. If you present an issue at the wrong moment, the chances are she or he will procrastinate.
- Prepare for your meeting: first because the advantage is to the one who is prepared, second because the preparation helps you reduce the time taken to come to the central issue.
- Show the forest before the trees in a discussion: if you want to avoid spending a lot of time on going back to basics before she or he is at full speed with you, start with the basics yourself. Remind them of the objective, where you stand today, and what you want their opinion on.

4. Information: It is not data. Perhaps you are supposed to analyze the results of a market survey. So be selective; be visual; group the data; bring out what is essential. Data overload creates stress, which in turn can create denial, rejection, and numbness. As a manager, you are paid to collect the data, and turn it into useful information.



- Don't give them only the bad news: also give good news. If you keep bringing only bad news, little by little you become the bad

news yourself. Don't minimize good news because you want to focus on the problems. By doing that you contribute to creating a bad atmosphere.

- Make sure they do not get the information from others too often: sometimes, by being shy about what we should give or because we think it is not relevant, we don't feed our boss with key elements. However, other people could do it before you. And then the hassle starts. "I heard..." "Why didn't you tell me..." And then you need to justify yourself; you may need to modify incorrect information. The trade off is between too little information leading to starvation, frustration, and/or restlessness vs. too much information leading to overload.
- Round off: what helps more to give sense to an amount or a size: 886,262.11 or 890K?

- Participate in and contribute to their informal network: every manager, hopefully, does not rely solely on formal information given in internal documents and reports. Some people use internal informal networks. Some others also have an informal outside network of experts, friends, and business connections that help them shape their vision of the world and how to act. You have yours; your boss has too. Why not volunteer part of your network, so that you do not always have to react and be defensive about information fed by people you do not necessarily think are the best sources?

5. Problems: Don't just come with problems, come also with solutions. Good bosses hate two kinds of behavior. The courtesan who always comes to tell them how great they are and the pyromaniac or fireman who comes to tell them, "There is a huge problem" and then says, "But don't worry, I will solve it!"

There is also a third kind, the monkey transferor. She or he has a problem and puts it on the boss's shoulders, rather than bringing a solution or at least some options.

On which of those steps in problem solving do you want your boss's input? Just be clear on what input you want rather than come with the stressful -- "I have a problem..." and throw the monkey.

6. Assumptions: Do not assume your boss knows as much as you do, but assume they can understand; so educate them. You are the expert. You spend all of your time, and that of your team, on the issue. You live with data, pressure points and levers; your boss doesn't. They do not know more than you do.

If you need their perspective, it is because it is broader; they have a better sense for interrelationships with other parts of the organization. You have two options.

- You inundate them with technical stuff they do not understand, hoping that the amount of technical jargon will knock them down and force them to agree with you. It may work, but it may become a barrier in communication, leading to lack of trust.
- You educate them by simplifying, using easy to understand language, feeding them with articles, examples, best practices, summaries that help them see a perspective. By creating understanding, you relieve tensions; create trust that can lead to better decision-making.

7. Delegations: Constantly test the waters. It's not al-

ways easy to define what is delegated to a person. Some companies prefer to use the principle of subsidiary rather than the principle of delegation: the principle of subsidiary stipulates that you can do everything except the following list, whereas in the principle of delegation you stipulate, "you cannot do anything except..."

Whichever is used, there will always be some doubt whether you have or do not have the delegation. You have two options: either you play it safe by always asking your boss's opinion; or you assume too much, make decisions and learn after the fact that it was not your's to decide. In between, there is the 'test the waters' strategy especially for things or areas, domains or steps that are unprecedented.

8. Promises: Do not promise what you cannot deliver, and avoid surprises, trust is at stake. Trust does not develop overnight and depends a lot on the predictability of the other person: What they say and do, how often they are living up to or not living up to their statements. In the same way, you will not fully trust your boss if he or she changes their mind too often or says things contrary to what you were told the last time.

You also want to avoid being seen as unreliable by not delivering on what you promise or surprising them with bad news without forewarning.

Do not promise dates for finishing projects you cannot handle. If you see that too much is asked of you, sit down and re-discuss priorities before proceeding, rather than becoming a bottleneck yourself. Involve your boss in the process, so it becomes a common priority.

Avoid bad surprises. If your job is to be in charge of a particular area, then it is also to be in charge of bad results and improving them.

Involve your boss in discussing and evaluating the risks, agreeing on key lead indicators that you will both share, so that neither you nor he or she will be surprised.

9. Differences: Manage differences in culture. To simplify, four main types of profiles are:

- People who like to 'control things' and introduce processes, develop more the 'now';
- People who are more concerned with people, develop more the impact on people;
- People who are more concerned with getting things done, start with key actions;
- People who are more concerned with ideas, frame proposals in concepts.



Of course, in managing your boss you should know their personal inclination, as well as your personal bias. If you are process oriented, you will tend to present issues in a systematic and orderly fashion, with pros and cons, chronology of tasks, etc.

If your boss is the action type, they could be bored with that approach. So an executive summary, emphasizing the key actions and results would be a handy starting point.

10. Trust: Don't be sloppy in your documentation. It undermines trust. By making the assumption that our boss will check what we write or say anyway, and that they will make changes, we sometimes tend to be sloppy in our writing. Tables are not finished, text is not re-read, places we are going to are not visited beforehand, spelling is not checked, and information is missing...



By not finalizing your facts, arguments, memos, spelling, supporting documents, etc., you can be sure some things will get changed, mistakes corrected. And soon you will be asked to show more facts and figures, and you will see more changes, more amendments. Soon all the delegation you had will be gone.

So, remember there are a correct and incorrect ways to manage your boss. Learn how to help them help you.

Taken from an article by Jacques Horovitz in the BoardSource newsletter



Memorandum from the Wyoming Livestock Board, Animal Health Division Black Faced Sheep for Importation into Wyoming

The Wyoming Livestock Board (WLSB) adopted new Chapter 8 Import Rules on March 31, 2007. In Section 28 we have requirements for genetic testing of black-faced sheep for susceptibility to scrapie:

Requirements for the importation of Ovine:

(g)(iii) *All black-faced Ovine that are imported into Wyoming for reproductive purposes shall be genetically tested for susceptibility to Scrapie. If found to be susceptible as determined by the Wyoming State Veterinarian, the following options exist:*

- (A) *The import will not be allowed;*
- (B) *If the Ovine is fourteen (14) months of age or older and tests negative on a Third Eyelid Test for Scrapie, the import will be permitted, or*
- (C) *If the Ovine is less than fourteen (14) months of age it may be imported under Quarantine to be tested by the Third Eyelid Test for Scrapie upon reaching fourteen (14) months of age. If it tests positive, it must be ear-tagged and sent to slaughter according to the Scrapie UMR.*

This has led some to question what genetic test will be required. At this time one strain of scrapie appears to be predominant in the U.S. sheep population and susceptibility to that strain is largely determined by the amino acids found at codon 171. Therefore, Wyoming State Veterinarian will require the genetic testing of codon 171 to be used when determining susceptibility to scrapie. Sheep testing with at least one arginine (R) at codon 171 will be considered resistant. All others will be considered susceptible.

A full copy of the WLSB Import Rules is on our website, and will be available for distribution. If you have any other questions or concerns about this issue please feel free to contact us at the Wyoming Livestock Board (307) 777-7515.



Summer's almost here! And after a long winter, everyone is looking forward to backyard BBQ's and weekend getaways. The different foods that usually accompany these activities - hamburgers, potato chips and hot dogs - are unfortunately hard to ignore, but do little to fuel your body with the essential nutrients you need.

As the temperature rises, it's important to eat foods that will maintain your energy and prevent you from feeling sluggish. Instead of reaching for a hot dog or a can of pop, read the tips below to find out how you can make this summer your healthiest season ever!

Take advantage of fresh produce. With produce at its peak during the summer months, it's the perfect time to indulge in nature's finest by eating the freshest vegetables. Instead of whipping up a batch of your famous potato salad for your next BBQ, put together a recipe for a varied, mixed green salad. If you're up to the task, create your own salad dressing. Do an Internet search, give me a call, or check out recipe books to get ideas for different variations of salads and dressings.

Eat your berries. Like vegetables, flavorful berries are available in stores. Instead of reaching for some apple pie à la mode, make yourself a delicious mixed fruit dish or fruit smoothie for dessert. When choosing fruits, always make sure that you get the freshest, and the best quality possible. If you're unsure on how to select produce, ask an employee in the produce department to help pick some out for you. Have some fun during this summer by going to different farmers' markets or going fruit picking with the family; our plums and cherries should be great this year!



Choose lean meats. Backyard BBQ's and outdoor cookouts are common sights during the summer. Eating the traditional cookout food - hamburgers, and hot dogs - are enough to expand your waistline and increase your daily fat intake. Instead of going for the traditional fare, why not choose leaner meats? Some healthy meat alternatives include ground turkey, **lean** pork and beef, or skinless chicken breasts. For added taste, soak the meat in a marinade overnight and grill it to get that delicious BBQ taste. This way you can have healthy, nutritious food without sacrificing the flavor. Also, add cheese, nuts and beans to your diet.

We all scream for ice cream! As the hot and lazy days of summer go by, we often get the urge to reach for a cool, sweet, refreshing snack like ice cream sundaes, popsicles and iced coffee drinks. It's okay to treat yourself to a double fudge sundae once in a while, but these high calorie treats can quickly become an everyday item. To satisfy your sweet tooth and not feel guilty, look for some healthier alternatives; buy low-fat versions of ice cream or sorbet and yogurt. Experiment with different brands and remember to control your portions!



Running empty on water? With hot temperatures and increased outdoor activities, more and more people will suffer from dehydration and other heat-related illnesses. It's extremely important that you stay well hydrated while doing physical activities during the summer. People who exercise strenuously or work hard need more water to keep themselves hydrated. To stay hydrated during hot weather, keep a bottle of water at work, or place it somewhere you can easily reach for it. Make drinking water a habit by drinking it at the same times each day, making a total of six to eight glasses. Working hard or not, water is vital for your overall good health, drink up!

Keep in mind this summer that the Cent\$ible Nutrition Program, which is through UW, is here to serve you! Tell your friends about our great program. We teach food preparation using our recipe book in cooking lessons adapted to your needs (you'll love the delicious meals). The recipe book and other kitchen gadgets are yours to keep if you graduate from the class. You also learn how to save money on groceries; meal planning; good nutrition; foodborne illnesses and many other topics. Please leave a message at Crook County Extension (283-1192) or the Weston County office (746-3531), if I am on summer leave. I will return in August. Let's plan on a class with your family and friends!



Summer Food Safety

Do foodborne illnesses increase during the summer months? Yes, and the reason is twofold. First, there are natural causes. Bacteria are almost everywhere - soil, water, and in the bodies of people and animals. These microorganisms grow faster in the warm summer months. Bacteria also need moisture to flourish, and summer weather is often hot and humid.

Second, the safety controls that a kitchen provides - thermostat controlled cooking, refrigeration, and washing facilities - often are not available when you picnic.



Clean: Wash Hands and Surfaces Often

- When eating away from home, find out if there is a source of clean water. If not, take water for preparation and cleaning. Or pack clean, wet, disposable washcloths or moist towelettes and paper towels to cleanse hands and surfaces.

Separate: Don't Cross Contaminate

- When packing the cooler for an outing, wrap raw meats securely, avoid raw meat juices from coming in contact with ready-to-eat food.
- Wash plates, utensils, and cutting boards that held the raw meat or poultry before using them again for cooked food.
- Don't use sauce that was used to marinate raw meat or poultry on cooked food. Boil used marinade before applying to cooked meat.

Chill: Refrigerate Promptly

- Cold, refrigerated, perishable food like luncheon meats, cooked meats, chicken, and potato or pasta salads should be kept in an insulated cooler packed with several inches of ice, ice packs, or container of frozen water.
- Consider packing beverages in one cooler and perishable food in another cooler because the beverage cooler will probably be opened often.
- Keep the cooler in the coolest part of the car and place in the shade or shelter (out of the sun, whenever possible).
- If a cooler chest is not an option, consider taking fruits, vegetables, hard cheeses, canned or dried meats, dried cereal, bread, peanut butter, crackers, and a bottle of refreshing beverage.
- Food left out of refrigeration for more than 2 hours may not be safe to eat. At 90°F or above, food should not be left out over 1 hour. Play it safe, put leftover perishables back on ice once you finish eating so they do not spoil or become unsafe to eat.

Cook: Cook to Proper Temperatures

- When grilling foods, preheat the coals on you grill for 20 to 30 minutes or until the coals are lightly coated with ash.
- Take your thermometer along. Meat and poultry cooked on a grill often become brown very fast on the outside, so be sure that meats are cooked thoroughly. Check them with a food thermometer. Insert the thermometer halfway into the thickest part of the meat. Be sure it doesn't go through the other side or doesn't hit a bone or grill grate.
- Cook meat and poultry completely at the picnic site. Partial cooking of food ahead of time allows bacteria to survive and multiply to the point that subsequent cooking cannot destroy them.

If you have doubts, throw it out!

Temperature Rules for Grilling

145°F Beef, Lamb & veal steaks, & roasts medium rare.

160°F Hamburgers, pork, veal & lamb, chops, ribs, & medium roasts.

165°F Ground turkey & chicken

170°F Chicken & turkey breasts

180°F Chicken & turkey whole birds, legs, thighs & wings



SNACKING FOR HEALTH

*Adapted By Vicki Hayman—UW Extension Educator—NE Area — Food Safety and Nutrition
From Research By American Institute for Cancer Research*

Do you snack on all the wrong things? It is time to take matters into your own hands. Snacking can contribute to a healthy diet. It can help you control your appetite and eat more fruits, vegetables, whole grains and beans - foods that will keep you healthy. But most processed snacks are oversized and outrageously high in trans fats, saturated fats, sugar and salt. Recently major food processors have admitted as much, and promised to reformulate and re-size their snack items to offer you a healthier product.

Until they fulfill that promise, consider "processing" your own nutritious snacks. That may simply involve washing a piece of fruit or putting a serving of dried fruit or unsalted nuts in a plastic bag. For the more adventurous, it could involve making your own 15-minute whole wheat pita chips in the oven or baking and freezing a batch of whole grain muffins on the weekend.

Some thought and very little preparation time can supply you with snacks that are homemade for health. ***Snacks do not have to be a "guilty pleasure." They can play an important role in a healthy, balanced diet. In fact, choosing the right snacks can help you eat the mostly plant-based diet - vegetables, fruits, whole grains and beans - that research shows can help protect against cancer and other diseases.***

Plant-based snacks can even help you manage weight, as long as you don't eat when you are not hungry. With today's hectic "eat-and-run" lifestyles and snack foods for sale almost everywhere, it's no wonder that America has become a culture of snackers. It is estimated that the average American eats more than 23 pounds of processed snack food products each year.

But instead of eating commercial snacks that raise disease risk, following two basic guidelines can make snacking healthful. First, the **types of snack foods** you eat should provide dietary fiber, phytochemicals, vitamins and minerals while helping you avoid excessive fat, sugar or salt. That makes plant-based foods ideal snacks. Crunch on unfrosted whole grain dry cereal like oat circles and whole wheat squares. Dip crispy vegetables into spicy brown mustard, chunky salsa, lowfat salad dressing or shrimp cocktail sauce. Or dunk fresh strawberries into lowfat vanilla yogurt for a sweet treat. Munch on a handful of sweet grape tomatoes or dried fruit. You'll make it easy to eat the 5 or more recommended servings of vegetables and fruits each day, and discover that nutritious snack foods are convenient and satisfying.

Second, the **portion sizes of snacks** should be appropriate to your body size, activity level and calorie needs for the day. It is especially important to avoid oversized items if you rely on packaged snacks, because they tend to be high in fat, calories and sugar or salt.

Healthy snacking may help control weight. Nutritious snacks can curb your appetite so you don't overeat at lunch or dinner.

In a recent study, some people who ate only one or two large meals a day experienced spikes in their blood insulin levels. The study, done by researchers at the University of Massachusetts Medical School, found that such insulin spikes from large meals may cause fat cells to absorb more blood sugar, leading to overweight and obesity.

In contrast, the study participants who ate several smaller meals throughout the day (for the same total calories) had more stable blood insulin levels and were far less likely to become overweight. Snacks can be portions saved from large meal time servings.

Be careful as well about the portion size of packaged snack foods. In recent years, manufacturers have begun competing by offering a lot more food at only a little more cost. That may mean selling you a package labeled "large," "king-size" or some other wording that implies getting more for your money. Don't fall into the trap of eating the whole thing because it's all in one wrapper.

Keeping your daily total of calories in mind is important when you choose a snack. So is eating according to your daily activity level. If you burn 300 or more calories every day during an hour of vigorous exercise such as aerobics or tennis, you can afford to eat 300 calories more than you would if you didn't burn those calories, to maintain the same weight.



Continued on the following page.

Think about making your own. You can control the ingredients and portion size for the most health benefits and best taste. The most healthful snacks contain nutrients, dietary fiber and high water content to make you feel full faster, while providing relatively few calories. Such snacks will help you maintain your weight.

In addition, your snack should help you keep to a predominantly plant-based diet. Vegetables, fruit, whole grains and beans offer you the phytochemicals, vitamins and minerals that bolster your body's natural defenses against cancer as well as heart disease and stroke.

It is recommended that you eat 6-12 servings of vegetables and fruits each day. That's not so difficult when you consider that a serving of most vegetables and fruits is 1/2 cup. It makes sense to use your snack to achieve this goal. Start with fresh produce and whole grains. The trick is to dress up these basic, nutritious foods in ways that make them varied and interesting. The recipes at the end of this brochure can help you. Or give yourself a natural, healthy jumpstart with some of these snack ideas:

- Spread apple butter or hummus (a smooth Middle Eastern dip made from chick peas and garlic) instead of butter on whole wheat toast or a bagel.
- Top a whole wheat English muffin or pita bread with tomato sauce, part-skim mozzarella cheese and leftover veggies; microwave until hot.
- Slice or buy pre-cut carrots, celery, bell peppers and cauliflower or broccoli florets. Dip them in salsa, hummus or lowfat dressing.
- Spray air-popped popcorn lightly with olive oil to avoid the calories, trans fats and sodium of packaged or microwave varieties.
- Halve a kiwifruit and use a small spoon to eat it right out of the skin.
- Dip toasted whole wheat pita bread wedges in salsa as a lowfat, low-calorie alternative to tortilla chips.



Some new and interesting snack ideas you may not have thought of:

✓ Microwave half a sweet potato wrapped in a moist paper towel for 5-6 minutes. It's delicious plain or top it with plain lowfat yogurt and a sprinkle of cinnamon.

✓ Wash and core an apple. Place it in a microwave-safe dish. Fill the center with granola, raisins and a tablespoon of orange or apple juice, then microwave on high for five minutes, or until soft.

✓ Toast nutritious pumpkin seeds at 350 degrees on a baking tray in a toaster oven for 15-20 minutes, stirring every few minutes, until dry and lightly browned for a crunchy, portable snack.

✓ Spread a tablespoon of lowfat cottage or ricotta cheese and a teaspoon of all-fruit preserves on a whole wheat tortilla, then roll up to munch or wrap in aluminum foil to take with you.

✓ Make an open-faced bruschetta sandwich on a slice of French bread topped with a spoonful of tomato sauce and sprinkled with Parmesan cheese.

✓ Look for frozen vegetable "potstickers" or dumplings in the Asian section of your grocery store's frozen food aisle. Steam them (don't fry) for 5-10 minutes, according to package directions.

✓ Try some adventurous food combinations: pineapple rings topped with hot pepper flakes; strawberries sprinkled with balsamic vinegar and black pepper; or chopped mango topped with a pinch of chile powder.

Snacks need to be convenient. Once you're hungry - sitting at your desk at work, running errands in the car, or watching TV at home - you are probably looking for a quick fix, not something that requires preparation time. When you feel the urge to snack, commercially packaged chips, crackers, candy and other packaged foods can be too appealing to resist. Plan to have convenient healthy snacks on hand by figuring out the times and places that you are most likely to have a snack attack. By planning ahead and preparing snacks ahead of time, you will be able to choose nutritious snacks when the urge strikes. To maintain a healthy weight, try to snack only when you are hungry, and not just from habit.

Your handy stock of healthy foods could include a bag of trail mix in the glove compartment, a small box of raisins in your purse or briefcase, a bowl of fresh fruit at your desk or a package of whole wheat pretzels in the kitchen cabinet. It's helpful to have an assortment of plastic zipper bags and plastic containers to make your homemade snacks portable. Storage containers can hold small portions of refrigerated leftovers from healthful meals to heat and eat later for snacks, such as a slice of cold veggie pizza, a cup of chili, a small salad, a cup of soup or a piece of skinless chicken.

MORE SNACKING TIPS

By Vicki Hayman—UW Extension Educator—NE Area — Food Safety and Nutrition

Snacking can easily become a diet downfall rather than an energy boost – so with that in mind, here are some healthy snacking options, which you can use to fill a gap without piling on the calories!

Almonds ‘n’ apricots: Almonds are high in protein and fiber, a good source of magnesium, and rich in vitamin E (an antioxidant). Dried apricots are rich in carotenes – which may lower the risk of cancers – and provide you with potassium, iron, calcium, silicon, phosphorus, and vitamin C. Dried apricots have a greater nutritional value than fresh ones because the nutrient content is so concentrated. Gram for gram, dried apricots have 12 times the iron, seven times the fiber and five times the vitamin A of fresh ones.



Yogurt ‘n’ honey: Yogurt is low in fat, high in calcium and good for your tummy. Opt for low-fat, unflavoured varieties, and add a touch of sweetness with honey. Honey has been shown to increase the blood’s level of protective antioxidants, and may also be a useful diet addition for people with high cholesterol.



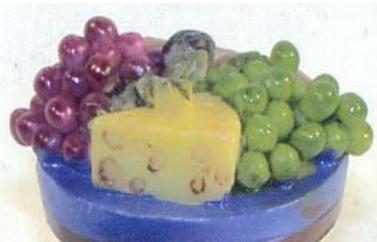
Apples ‘n’ pears: Apples are high in pectin, a soluble fiber; contain quercetin – an antioxidant that can reduce damage caused by cholesterol; and have a high water content, which will help to keep your thirst satisfied. Apples are also a good source of vitamin C. Pears are high in potassium and a good source of fibre and vitamin C.

A homemade smoothie (i.e. no added sugar, sweetener or additives): While fruit juice counts towards your all-important fruit and veg target, it doesn’t offer any fiber. A smoothie contains the pulp of the fruit, not just the juice, and provides you with fiber plus a good array of vitamins and minerals. It also boosts hydration, and liquid foods help you to feel full for longer, making you less likely to overeat later on.



Peanut butter on rye crisps: This is the perfect combination of protein, fat, carbohydrate, and lots of fiber. While peanut butter is high in fat, it’s the unsaturated (or ‘good’) kind – and peanuts are a great source of the antioxidant vitamin E. Peanut butter is also rich in protein and a good source of magnesium. Opt to spread the peanut butter on rye crisps – which are low in salt, high in fiber.

Seeds and raisins mix: While seeds are high in fat, it is mostly unsaturated ‘healthy’ fat. Seeds are also high in protein and a good source of phytosterols – plant compounds which are believed to reduce cholesterol and enhance immune function. In a recent report, sunflower seeds proved to be the best source of phytosterols – as well as being a good source of magnesium, iron, copper, manganese, and vitamin E. Pumpkin seeds are a good source of zinc, magnesium, and manganese. Add a handful of raisins and you’ll be upping your iron and potassium intake.



Grapes and cheese: If you’re a cheese lover, you are probably only too aware of its high saturated fat content – which is particularly the case for the harder varieties. But it’s not all bad: hard cheese such as cheddar is a great source of calcium and phosphorus, and is one of the few good sources of vitamins B2 and B12 for non-meat eaters. Plus, if you buy stronger-tasting cheeses, you will only want to eat a little at a time. Eat with red grapes to up your fiber and fruit intake. Grapes contain polyphenols – antioxidants which are helpful to the heart – and ellagic acid, which is a cancer-fighting phytochemical.

Avocado on toast: Avocado is something of a ‘superfood’, as it is rich in vitamin E, high in monounsaturated fats and a good source of potassium – as well as vitamin B6, which aids the process of serotonin synthesis (a process that promotes good mood). Spread half a ‘medium ripe’ avocado on a slice of whole wheat toast to get a tasty, wholesome snack containing a healthy dose of fiber. And if you like a spicy touch, sprinkle it with a dash of Tabasco sauce!



Northeast Extension Connection

A quarterly report from Campbell, Crook and Weston Counties Extension Services

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