



# NORTHEAST EXTENSION CONNECTION

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## Is Managing Your Young Bulls Different Than Managing Your Older Bulls?



**By Blake Hauptman**  
Ag and Hort  
Educator

Recently, I received a phone call from an individual with the question, “Is managing your young bulls different than managing your older bulls?” Quite frankly I was caught a little off guard, but I very capably answered the question by responding “Probably?”

The reason I didn’t feel totally comfortable answering the question right then, was because I was a little unsure if my past ranching experiences, on managing bulls, was done according to “the book”. We conducted breeding soundness exams and factored in bull to cow ratios, but I questioned, “Is there more we could or should have done for our young bulls that we just wrote a nice big check for?”

So, doing a little research I found what “the book” had to say on the matter.

### **Are nutritional requirements different for young bulls compared to older bulls?**

Yes. Young bulls are still in their growth and development stages. So, it is important to know their nutritional requirements, and manage their feed resources so they have an acceptable Body Condition Score (BCS) prior to breeding.

Nutritional requirements will change depending on the growing bull’s



potential mature weight and your target average daily gain (ADG). An 1100 pound bull, growing to reach a mature weight of 2000 pounds will need to consume 27 lbs/day of dry forage containing 60% Total Digestible Nutrients (TDN) and 7.1% Crude Protein (CP) in order to gain 1.7 lbs/day.

Make sure you check National Research Council (NRC) requirements to meet and maintain an acceptable level of nutrition for your bulls so they are in proper breeding condition. See the table on the next page for a small sample of information on the nutrient requirements for growing and mature bulls.

### What body condition should my bulls be in?

Your bulls should have a BCS around 6 on a 9 point scale at the start of breeding. It is important that your bulls are not under-conditioned or extremely over-conditioned.

Over-conditioned bulls are not optimal for breeding and you could see negative effects on their reproductive performance. Obese bulls will store excess fat in their scrotum and this will increase scrotal temperature and reduce sperm production and its quality.

Under-conditioned bulls will also not perform well for the duration of the breeding season. You should expect your bulls to lose significant amounts of

weight during this time. If a young bull is not in good condition prior to breeding it could impact their performance both in the short-term and long-term.

### What can be done at a young age to increase a bull's longevity?

A yearling bull's longevity can be improved with proper management both during their first breeding season and post-breeding. Ideally, yearling bulls should be left with the cow herd for 60 days or less to avoid detrimental weight loss. Monitor their body condition during the breeding season.

Because their nutrient demands are greater, it is optimal to manage young bulls separately from older bulls through their second winter. Good quality forage or additional supplements should be made available to them if needed.

### Should young bulls be managed in separate breeding groups?

If possible, try to group bulls that are of similar age and size to minimize dominance by your older, larger sires.

Be aware that an older bull, with poor reproductive performance, that has established seniority over younger more fertile bulls, could greatly impact pregnancy rates in your cow herd.

**Table 1. Nutrient requirements of a growing bull reaching a 2,000 lb mature weight.**

Body Weight (lb)	ADG (lb)	DMI (lb)	TDN	NEm	NEg	CP	Ca	P
1,000	0.5	24	50	0.45	0.20	7.0	0.17	0.12
	1.7	25	60	0.61	0.35	7.5	0.25	0.14
	2.8	25	70	0.76	0.48	9.1	0.32	0.17
	3.5	23	80	0.90	0.61	10.5	0.38	0.20
1,500	0.5	32	50	0.45	0.20	7.0	0.16	0.12
	1.7	34	60	0.61	0.35	7.0	0.19	0.13
2,000	0.0	37	46	0.39	0.00	7.0	0.17	0.13
	0.5	40	50	0.45	0.20	7.0	0.16	0.12

**Summary of data from Oklahoma State University publication E-974; Nutrient Requirements of Beef Cattle.**

# Temperatures—What Have They Been?



**By Blaine Horn**  
Sustainable  
Management of  
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Resources Educator

I first heard of 'Global Warming', now referred to as 'Climate Change', in the early 1990's. I was skeptical, but because I had access to the temperature record for Springfield, Colorado (my home at the time) going back to the late 1880's, I reviewed them to see if there was anything to this. I found that temperatures had been increasing, so I had to recognize that 'Global Warming'

may be occurring. Whether human activity had anything to do with the apparent increase I don't know and is not the purpose of this article.

The point of this article is to show how much temperatures have changed in Buffalo, Wyoming over the past 118 years. If temperatures are increasing, especially in the spring and fall, it would be good to know as it could impact agriculture. Interestingly, I've heard over the past few years, and you may have too, that there has not been any warming since the late 1990's and instead cooling might be occurring. If so, it would be good to know as well for agricultural producers, especially those operations dependent upon irrigation.

Buffalo, WY temperature records were obtained from:

<http://www.wrcc.dri.edu/summary/Climsmwy.html>

Monthly temperature recording for Buffalo began in April 1899; was consistent through 1909 then six years of no reports. Between 1916 and 1937, monthly temperatures were logged for 80% of the total number of months and then ceased until June 1956. From June 1956 through 2016, 97% of the months had temperatures reported. Recordings for every month of the year from 1899 to 2016 would have been ideal, there is enough months reported, especially for each month of the year, to tell what the temperatures in Buffalo have done over the last 118 years.

To assess changes in monthly maximum (high) and minimum (low) temperatures since the beginning of the 20<sup>th</sup> Century, temperatures from 1899 to 1937 were averaged and compared to the averages for

ten-year increments beginning in 1957 and ending in 2016. Changes in annual temperatures is reported first and then that for the seasons of the year: Winter (Dec—Feb); spring (Mar—May); summer (Jun—Aug); and fall (Sep—Nov).

Although there was some variation among months in whether temperatures trended up or down for both highs and lows the annual high temperature for 1957-1966 was warmest; 2.6 degrees warmer compared to 1899-1937 and then it waned by 2.3 degrees over the next two ten-year periods (Chart next page). Highs were then greater by one degree for 1987-1996. Over the past 20 years highs have declined by an average of 0.09 degrees per year. Interestingly, the low temperature was coolest for the 1957-1966 period but steadily increased until it was four degrees warmer for 1997-2006. However, lows have been cooler over the past ten years by 2.5 degrees.

Winter months of 1977-1986 were the coolest among the periods for both high and low temperatures and the resultant mean (Table next page). Temperatures then increased over the next two ten-year periods but declined over the last one to where the high temperature was a degree cooler compared to the 1899-1937 period but the low temperature was still warmer by about two degrees. However, considering the 1997-2006 period was six degrees warmer than the 1899-1937 period this four degree decline is probably good. These trends were similar among the three months.

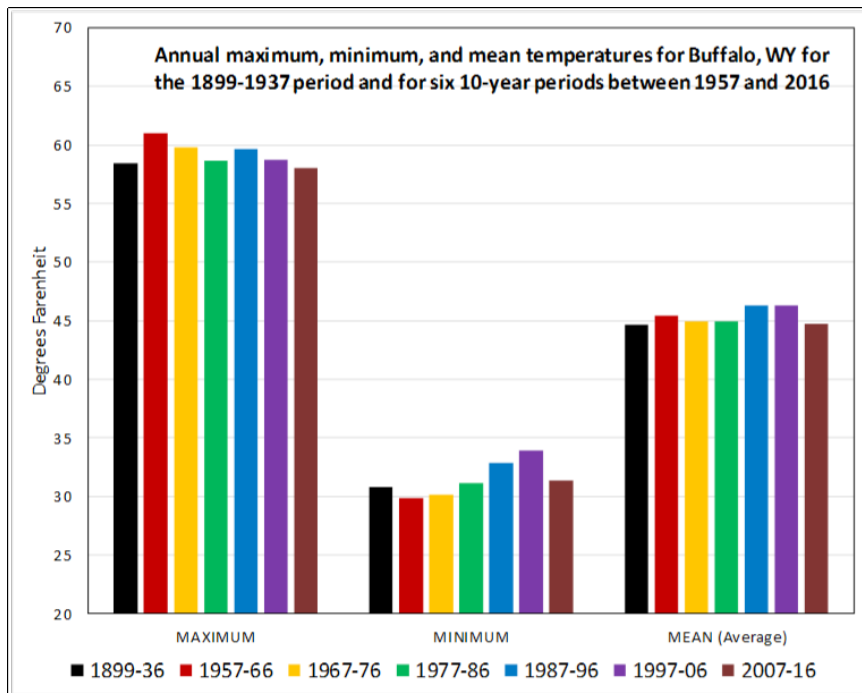
High and low spring temperatures were warmest for the 1987-1996 period but cooled over the next two 10-year periods to where the high temperature for 2007-2016 was the coolest (Table next page). Although the low temperature for 2007-2016 was cooler it was still slightly warmer compared to the periods prior to 1977. March highs were greatest for the 2007-2016 period compared to the earlier periods, whereas April and May highs were the lowest. Lows for all three months were greatest for the 1987-1996 period but fortunately declined thereafter. Although warmer March high temperatures could lead to an earlier thaw than what we have experienced in the past, if April highs stay as cool as they were for the past ten years, green-



up of rangeland plants will probably be about the same as it has been. Earlier green-up would be nice for grazing animals, both domestic and wild, but spring precipitation amounts would need to increase to ensure drier conditions in early summer did not happen which could adversely affect total forage production. April precipitation the past ten years averaged 0.30 inches less than the average for the previous 100 but the May average was 1.10 inches more. Probably enough to ensure a good grass year even with the June average being 0.30 inches less.

Summer highs were warmest for the 1957-1966 period but declined thereafter and as a result 2007-2016 highs were the same as for 1899-1937 (Table next page). Low temperatures were warmest between 1977 and 2006 but have declined since. These cooler summer temperatures, if they persist, would maintain, or even extend, the green period on our rangelands and potentially reduce the total amount of water needed for irrigated crops.

The warmest fall high temperatures occurred in the 1957-1966 period and the coolest in the 1977-1986 period, a 4.6 degree difference (Table below). However, high temperatures among the other periods were similar. Curiously, minimum temperatures were lowest in the 1957-1966 period but thereafter increased for each 10-year period, except the last. The high temperature for October was coolest among all periods in the 2007-2016 period; trending downward since 1987. Whereas, November's high has been trending upwards since 1977 but the high for 2007-2016 was lower compared to that for 1899-1937 and 1957-1966.



Seasonal Maximum, (Max) Minimum (Min), and Mean (average) temperatures in Buffalo, WY for the 1899 through 1937 period and for 10-year periods beginning in 1957 and ending in 2016.

Period	Winter			Spring			Summer			Fall		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1899-1937	37.4	10.4	23.9	55.4	29.0	42.2	80.4	50.9	65.7	60.5	31.2	45.9
1957-1966	40.0	11.4	25.7	57.3	28.9	43.1	83.6	49.3	66.4	63.1	29.9	46.5
1967-1976	39.1	11.4	25.2	56.8	28.9	42.8	82.6	50.1	66.3	60.7	30.3	45.5
1977-1986	36.1	9.8	22.9	57.0	30.7	43.9	83.2	53.2	68.2	58.5	30.8	44.6
1987-1996	37.9	13.1	25.5	58.4	32.6	45.5	82.3	53.0	67.6	60.1	32.7	46.4
1997-2006	39.1	16.4	27.8	55.2	31.2	43.2	81.0	53.9	67.5	59.6	34.1	46.8
2007-2016	36.5	12.1	24.3	55.0	29.6	42.3	80.5	51.5	66.0	60.2	32.4	46.3

Is 'Global Warming' occurring? It apparently did, but whether it continues to do so is questionable based on temperatures for Buffalo. Temperatures for Cheyenne, WY, which have been recorded for each month since 1915, were also looked at. Cheyenne temperatures were warmer for each consecutive ten-year period until 1997-2006 where they leveled off and appeared to have cooled slightly over the 2007-2016 period. Maybe the warming we have been experiencing is abating, only time will tell.

# Beginning the COLLEGE Admissions Process; What To Know BEFORE You Go!



By **Michelle Pierce**  
Community  
Development  
Educator

Whether you are a parent, guardian or future student, navigating the post high-school educational system can be difficult. Most colleges offer a college admissions guide to begin the process on their website.

College is one of the most expensive purchases, next to homes and vehicles. In the United States, there are more than 44 million borrowers with 1.3 trillion dollars in student loan debt

according to Make Lemonade. The class of 2016 has \$37, 172 in student loan debt. OUCH!

To begin, WHO is going to college? The WHY are we attending college and WHAT is the exact purpose (major) needs to be answered before applying to higher education.



WHERE and WHEN are also factors in the process. College is extremely personalized; which involves active participation and a long-term plan.

1. What types of grades do I earn? Higher grades get more opportunities for scholarships (free money). Check with your high school guidance counselors for unique opportunities in your area.
2. Have I investigated scholarship, grant, and work study opportunities? Loans will need to be re-paid. CRUNCH the numbers BEFORE taking a student loan. Student loan debt cannot be placed in bankruptcy if it is federally funded.
3. Can I afford to pay student loans back in addition to regular living expenses?
4. Would I pay in or out of state tuition?

5. What are competitive rates for colleges in my area?
6. What is the college admission process? Is there a fee to apply?
7. What type of ACT/ SAT scores and/ or grades does this college require?
8. Are scholarships available for the entire duration of the degree? How MUCH is the entire COST? Changing your mind and major is okay yet can be expensive.
9. Have you (and they) visited at least 5-7 colleges? Colleges are marketing themselves like businesses. Some offer co-ed dorms, students can paint their rooms, pet allowed with many other "student-friendly" policies.
10. Housing: are there dorms available, live with a roommate, or can the student live at home? Not exactly the college experience some are looking for, living with their parents.
11. Can the student work while going to college? Is there work-study available? Work study jobs are student-friendly and accommodate student schedules. Students who work while attending college will have a better sense of where money comes from.
12. What are the options for food: cafeteria, cooking or eating off-site?



13. Cost of books, other college fees, computer, and office supplies.
14. ALL students who are interested in financial aid for college need to complete the free application for student aid (FAFSA) form. FAFSA is used to determine your eligibility for assistance (scholarships, grants and loans). Must be completed by a deadline to receive funding.

FAFSA website: <https://fafsa.ed.gov/>

15. Check out all types of academic programs. What would you like to major in? Be sure and pick a program that suits you, is marketable and earns money. Medical and technology are growing career fields.



16. Is college the best option for me? There are several jobs that do not require a college degree. Are you ready and willing to put forth the effort it takes to be successful at college? Sometimes a job is better suited to “find yourself.” College takes time, energy and money to complete and is an expensive way to “find” yourself.

#### 2017 STATISTICS from STUDENT LOAN HERO:

The most recent reports indicate there is: \$1.31 trillion in total U.S. student loan debt 44.2 million Americans with student loan debt Student loan delinquency rate of 11.2% Average monthly student loan payment (for borrower aged 20 to 30 years): \$351 Median monthly student loan payment (for borrower aged 20 to 30 years): \$203 Private student loan debt statistics Private student loan debt is on the rise; \$6.2 billion was borrowed in 2012-2013,



up from \$5.5 billion in 2011-2012 From 2011-2012, borrowers didn't take advantage of federal student loans as much as they could have: 19 percent didn't take out Stafford loans, 8 percent didn't apply for federal financial aid, 11 percent applied for federal aid but didn't take out a Stafford loan, 28 percent had Stafford loans but borrowed less than they were eligible for In 2011-2012, 48 percent of private loan borrowers attended schools that had tuition costs of \$10,000 or less Nearly 1.4 million undergraduates borrowed private loans in 2011- 2012 Graduate student loan debt About 40 percent of the \$1 trillion student loan debt was used to finance graduate and professional degrees. Combined undergraduate and graduate debt by degree: General Student Loan Debt Facts A high-level look at the United State's student loan situation. MBA = \$42,000 (11% of graduate degrees) Master of Education = \$50,879 (16%) Master of Science = \$50,400 (18%) Master of Arts = \$58,539 (8%) Law = \$140,616 (4%) Medicine and health sciences = \$161,772 (5%) Data sources: Newamerica.org study, Ticas.org

Before attending college, there are many considerations and decisions to be made. Be informed with a personalized strategy, checklist and timeline for your best college experience.





# Forget the Plate, Build a Bowl!



**By Vicki Hayman**  
Nutrition and  
Food Safety  
Educator

Gorgeous, layered, satisfying bowls of food have become the next wave of healthy eating. Meals in a bowl are a convenient and clever way to mix all of your favorite ingredients. When gathered together in a single dish, lean proteins, greens, vegetables, and whole grains or pasta nestle with each other so they intermingle in a delicious matrix of taste and texture.

Since we eat with our eyes, presentation of bowls is key. Often bowls are artfully arranged in a rainbow of hues. The good news is you can bring this trend into your home by adhering to a few simple steps. The best bowls have a balanced combination of flavors and textures. Every bite is a surprise, a little different from the one before it.



When assembling your bowl, embracing variety of color, texture, and flavor! The formula to building a bowl is essentially the same: grains, vegetables, protein, sauce or dressing, and endless topping's combinations of nuts, seeds, olives, herbs, and dried fruits.

Start with selecting a whole grain and/or starch as the base: barley, bulgur, quinoa, or try out different kinds of rice such as long-grain, brown, basmati, or Jasmine. In addition, consider couscous or pasta for the base. Starchy vegetables such as potato, sweet potato, winter squash, and corn also make a good base. The base adds volume and fiber to fill up your stomach, while soaking up all the sauce that trickles down through the top layers.

Then choose a minimum of two to three colored

vegetables to add. As for vegetables, anything goes, be it raw, steamed, roasted, or sautéed. Try avocados, beets,



broccoli, Brussels sprouts, cabbage, carrots, cauliflower, cucumbers, green beans, kale, leafy greens, mushrooms, onion, peas, peppers, spinach, summer squash, tomatoes, etc.

Now you need a protein. Think 3 ounces of meat or fish, whether left over or freshly cooked. Meats can be beef, chicken, lamb, pork, or turkey. Enjoy salmon, shrimp, tuna, or other fish/seafood. Vegetarians can add tofu, tempeh, seitan, lentils, soybeans, beans, or veggie burger. In addition, eggs, cheese, and cottage cheese may be used.

Fruit is also fair game. Think berries, mango, citrus, apples, pear, pineapple, and dried fruit.

Give your bowl a punch of flavor by adding a flavorful dressing or condiment. The sauces and dressings are what tie the flavors in the bowl together. Use ingredients that mesh with the flavors of the bowl.

Combine soy sauce, sesame oil, ginger, and rice vinegar or lime juice for Asian-inspired combinations. Pesto goes well with roasted red peppers, eggplant, or anything Mediterranean. Bottled hot sauce turns up the heat. A basic vinaigrette or Italian dressing will blend with practically anything.

Other great options include teriyaki sauce, hoisin sauce, soy sauce, sriracha sauce, or BBQ sauce. Just be mindful of portion sizes. Stick to a one- to two-tablespoon rule of thumb when pouring on the flavor.

To manage overall calories and fat grams, be mindful



but experimental with toppings. Think herbs, hummus, olives, quinoa, roasted chickpeas, seeds, or toasted nuts. Pickled veggies, kimchi, sauerkraut, or salsa will provide flavor and depth. Try complex cheeses like feta, blue cheese, Gouda, or goat cheese.

Mix and match. Then mix and match again. Bowls offer boundless opportunity for building a balanced meal in a beautiful way!

### Cobb Salad

Serves: 2

Ingredients:

- 3 ½ cups loose greens (Kale, Spinach, Swiss chard, etc.)
- ½ cup celery, chopped
- ½ cup cauliflower, chopped
- ½ of cooked sweet potato, sliced
- ½ of an avocado, sliced
- ½ of a small grapefruit, slices
- ⅔ cup dried cranberries
- 1 ounce cooked ham, turkey, or chicken, chopped
- 1 hard-cooked egg, sliced
- 1 sage leaf (optional)
- ⅔ cup slivered almonds
- black pepper
- sea salt
- olive oil/vinegar or creamy avocado dressing

Instructions:

1. Wash fruits and vegetables.
2. Dry and slice/chop fruits and vegetables.
3. In a serving bowl, arrange the greens. Then top with vegetables, avocado, and fruit.
4. Top with meat, egg, sage, and almonds.
5. Season with pepper and salt to taste.
6. Drizzle with olive oil and vinegar or a creamy avocado dressing.



### Japanese Beef Bowl

Serves: 2

Ingredients

- 1 cup cooked rice or asian noodles
- 1 large white onion
- 1 teaspoon vegetable oil
- ½ cup water
- 2 Tablespoons soy sauce
- 1 Tablespoon brown sugar
- 1 Tablespoon mirin
- 1 Tablespoon sake or rice wine vinegar
- ½ pound beef ribeye steak, thinly sliced
- 1 Tablespoon sesame seeds, or to taste (optional)
- 2 green onions, thinly sliced, or to taste (optional)
- 2 teaspoons pickled ginger (beni shoga), or to taste (optional)
- 1 sheet dried seaweed, cut into strips, or to taste (optional)

Directions

1. Halve the onion and discard the central-most part. Cut halves into thin slices.
2. Heat oil in a large skillet or wok over high heat. Add onion; cook and stir until it starts to brown, about 30 seconds. Reduce heat to medium-low; add water, soy sauce, brown sugar, mirin, and sake and simmer until flavors combine, about 3 minutes.
3. Stir beef into the skillet. Cook, covered, until beef is cooked through, 3 to 5 minutes.
4. Divide between 2 bowls of rice and garnish with sesame seeds, green onions, ginger, and seaweed strips.





# Feeling Stressed? So Are Your Kids!



**By Stacy Buchholz**

4-H / Youth  
Development  
Educator

As an adult, it is easy to look at childhood as a carefree time, no bills to pay, just school, involvements, and play time. We often forget that growing up is hard, children are facing a number of challenges day to day, and consistent change creates inevitable stress. Stress is a natural, normal, and ever-present part of life, and teaching youth to manage that stress is critical for helping them become successful

adults. Try utilizing some of these strategies from the Center for Effective Parenting as you help your children learn to manage the stress in their lives.

Know the signs of childhood stress: The first step to helping your child manage stress is identifying when they are stressed. Indicators include: a tight throat, sweaty palms, headaches, fatigue, nausea, diarrhea, uneasiness, indigestion, depression, restlessness, frustration and a change in sleeping patterns. Other indicators might include: withdrawal, irritability, aggression, excessive daydreaming, excessive sensitivity, changes in eating habits, and general changes in behavior.



- Prepare for situations you know could cause stress (conflicts with friends, facing criticism, etc.). Help your child problem solve these potential stressful situations. Start by helping him clearly define the problem. Then, together, brainstorm a list of possible solutions, and finally evaluate those situations based on positive outcomes to help your child make a decision on the best course of action to take. Rehearse this course of action to help your child feel confident in their solution and abilities.
- Stop trying to prevent your child from feeling stress. While you want to keep your child from experiencing stressful situations, overprotecting

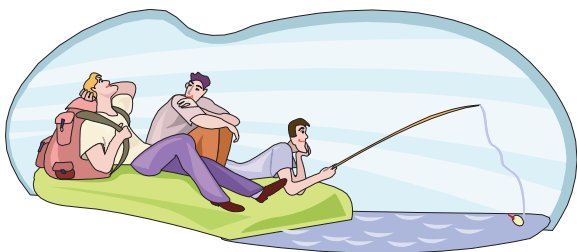
them can do more damage than good. Children only learn how to cope with stress while experiencing it.

- Help your child build positive self-esteem. Help your child gain confidence handling problems by giving them responsibilities and letting them make decisions from an early age.
- Be there for your child when she is experiencing stress. Make sure your child knows you understand they are experiencing difficult times. Having a warm and supportive relationship with a parent is one of the single best predictors of how well children cope with stressful situations during childhood.
- Listen when your child needs to talk. Make sure to ask open-ended questions to help your child work through the stressful feelings they are experiencing. Open-ended questions include "What do you think about ...?" and "How does ... make you feel?" Allowing your child to talk about stressors helps your child identify those things that stress them.
- Make sure your children are healthy. Your child needs to eat a nutritious diet, get enough sleep, and exercise regularly to help them cope with stress.
- Model appropriate coping skills for your children, after all, you are the hero they look up to. If



children see their parents using appropriate coping skills when they are under stress, they will be more likely to use appropriate skills when they experience stress too.

- Teach your child relaxation skills. We all need to relax, and helping your child find that outlet is a great way to help them cope with stress.
- Teach them to handle criticism positively. Everyone is criticized at one time or another and



increased stress can result when a person has difficulty accepting that criticism. Make sure your child knows that no one is perfect and that we all make mistakes that we can learn from. Make sure to model this appropriate behavior as well.

- Ensure you are following a consistent routine. Children need predictability in their lives, so a consistent schedule (meal times, homework, bed time, etc.) allows children to know what to expect. This in turn, helps them feel secure and reduces stress.
- Teach your child time management skills, prioritize tasks, and limit themselves to what they are capable of accomplishing.



- Help your children reframe stressful situations in a positive manner. While children may not have control over things that affect them, they can control how they react to them. A child's perception of a stressful situation can help determine how

stressful it becomes.

- Help them keep their expectations and beliefs realistic. Straight A's or perfect attendance are not always realistic. Instead, help your child understand her capabilities, and develop healthy

expectations for behavior, performance, etc. This will help your child keep their potential stressors in check.

- Encourage your child to be assertive and stand up for themselves. Studies show children who are not confident standing up for themselves have a harder time coping with stress.
- Help your child develop a sense of humor. Laughter is the best medicine, and laughing about stressful situations is the best way to help cope with them.



So parents, as you help your children navigate all those things that stress them out, keep these pointers in mind. The best assurance your child will be able to cope with stress in adulthood is to teach them now! Start early, children feel stress from a very early age!



# Eating on the Road



**By Kentz Willis**  
Nutrition and  
Food Safety  
Educator

Today's busy lifestyles inevitably require travel, and making positive food and fluid choices while travelling is difficult. This can be especially challenging in Wyoming, as the smaller population results in fewer options for places to purchase food. A small investment in time to plan your travel food choices will pay dividends in your future health and well-being.

Planning ahead is the most important step for busy individuals

and their families. Consider the duration of travel, how much food will be needed, and whether it can be packed ahead or will need to be purchased while travelling. Packing ahead is a great option as it reduces the risk of poor food choices on the road. If you aren't able to pack the foods needed it's important to consider the food options available during your travel. The table below outlines some good tips whether packing or eating out.

Fluid choices are just as important as food choices. Be sure to maintain hydration by keeping a water bottle handy. Other beverages, such as sodas, energy drinks, and other sweetened beverages provide extra calories (and sugar!) that most of us don't need. If plain water isn't enough, some individuals enjoy flavoring their water with fresh fruits or dried teas.

Make efforts to maintain food safety by keeping hot foods hot and cold foods cold! Food left in the bacteria 'danger zone' (41°F - 135°F) more than two hours should be discarded. Additionally, washing and prepping foods before travel (in your nice, clean kitchen!) can help to keep foods safe. Finally, be sure to wash hands well before eating or preparing food - this is the most important defense against foodborne illness.

Eating well on the road is never easy, but with a little bit of work everyone can enjoy the benefits of good food and fluid choices while travelling. Kentz Willis, M.S., is the University Extension Educator in Nutrition and Food Safety for Northeast Wyoming. He can be reached via email at [kwillis3@uwyo.edu](mailto:kwillis3@uwyo.edu).

## Healthy Cooler Snacks:

*Use an ice pack to help keep these foods chilled*

- Yogurt (be mindful of added sugars in flavored varieties)
- Vegetables with hummus (recipe here: [www.bit.ly/chickpeahummus](http://www.bit.ly/chickpeahummus))
- Hard boiled eggs
- Sandwiches with lean meat

## Shelf-Stable Snacks:

*These foods are great options when you are not able to keep things cool*

- Fresh fruits (be sure to wash first!)
- Crackers and tuna packets
- Nut butter sandwiches
- Trail mix or roasted nuts (lower salt varieties preferred)
- Sport bars or granola bars (avoid those high in sugar)

## Options for Eating Out:

*Use nutrition facts labels and ingredient lists to help guide decisions on unfamiliar foods. Look for whole grains and fiber while limiting added sugars, salt, and fat.*

- Convenience store: Look for foods you would buy in a grocery store. Many convenience stores are stocking fresh fruits and low fat dairy products. There are often snack bars and granola bars available, but watch out for those high in added sugars!
- Fast food: Try to choose items that are broiled, baked, or grilled as opposed to breaded or fried. Side salads and fruits are often available, but limit high fat dressings and dips.
- Traditional restaurant: Search menus online (if possible) to find the restaurant with the best choices.



## NORTHEAST EXTENSION CONNECTION

A quarterly newsletter from Campbell, Crook, Johnson, Sheridan, and Weston County Extension

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