



Because work should give us satisfaction and income.
Not aches, pains, or trips to the ER.

Healthy Living For Loggers

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Section 1: Traveling the Road to Health

Loggers, Livelihood, and Longevity

Do you deal with one or more of the following?

HIGH BLOOD PRESSURE (YOU)

HIGH CHOLESTEROL (YOU)

HIGH TRIGLYCERIDES (YOU)

HISTORY OF HEART DISEASE (YOU)

FAMILY HISTORY OF HEART DISEASE

How many beats does the heart produce in an average lifetime?

500 MILLION

1 BILLION

2.5 BILLION

4 BILLION

The length of all the blood vessels in your body is equivalent to how many trips between Portland and Fort Kent?

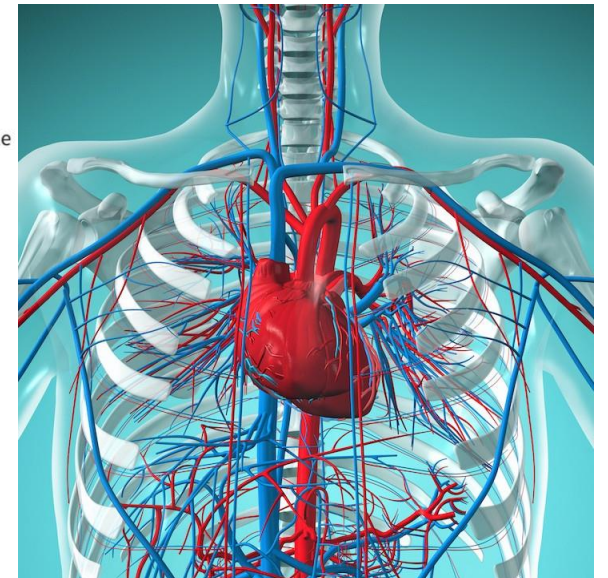
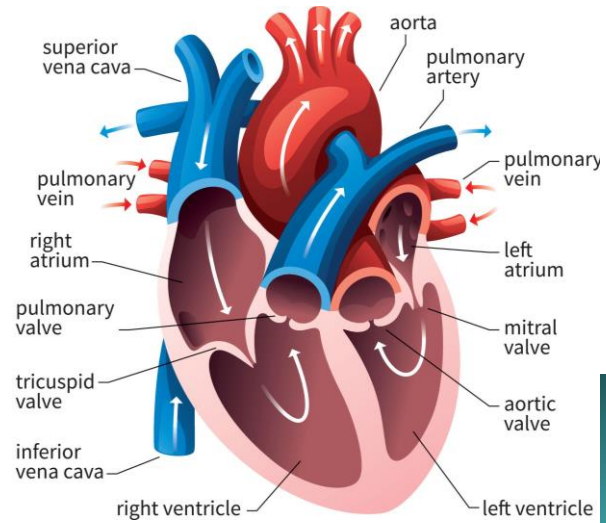
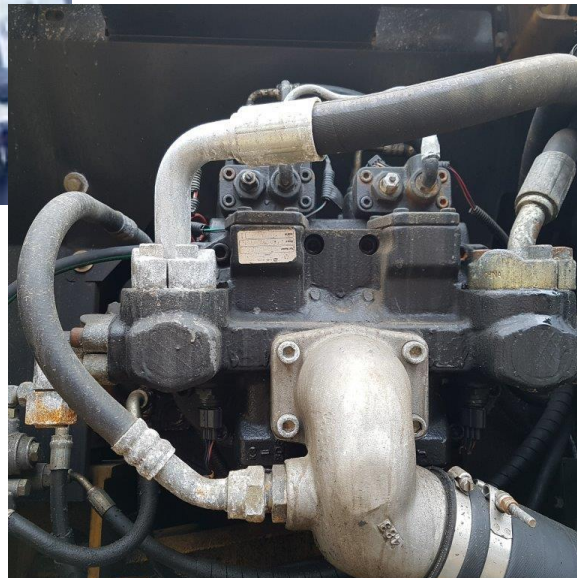
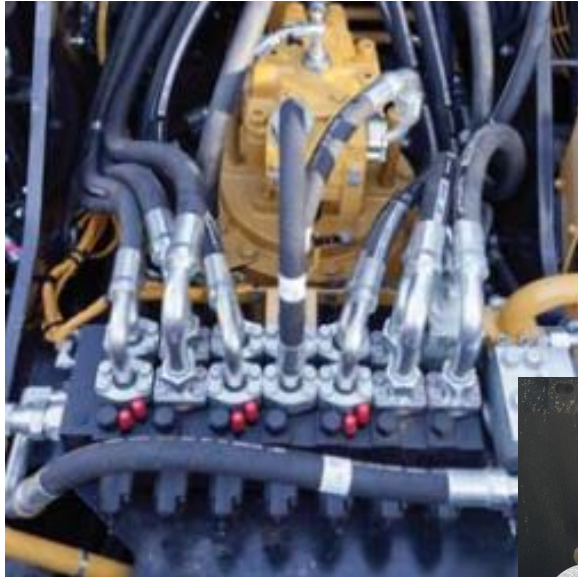
26

73

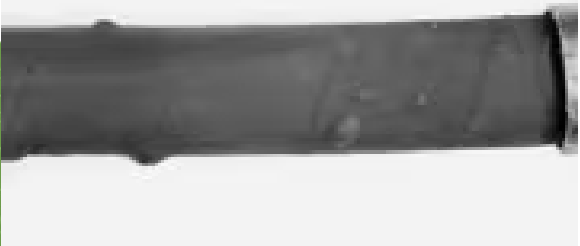
137

191

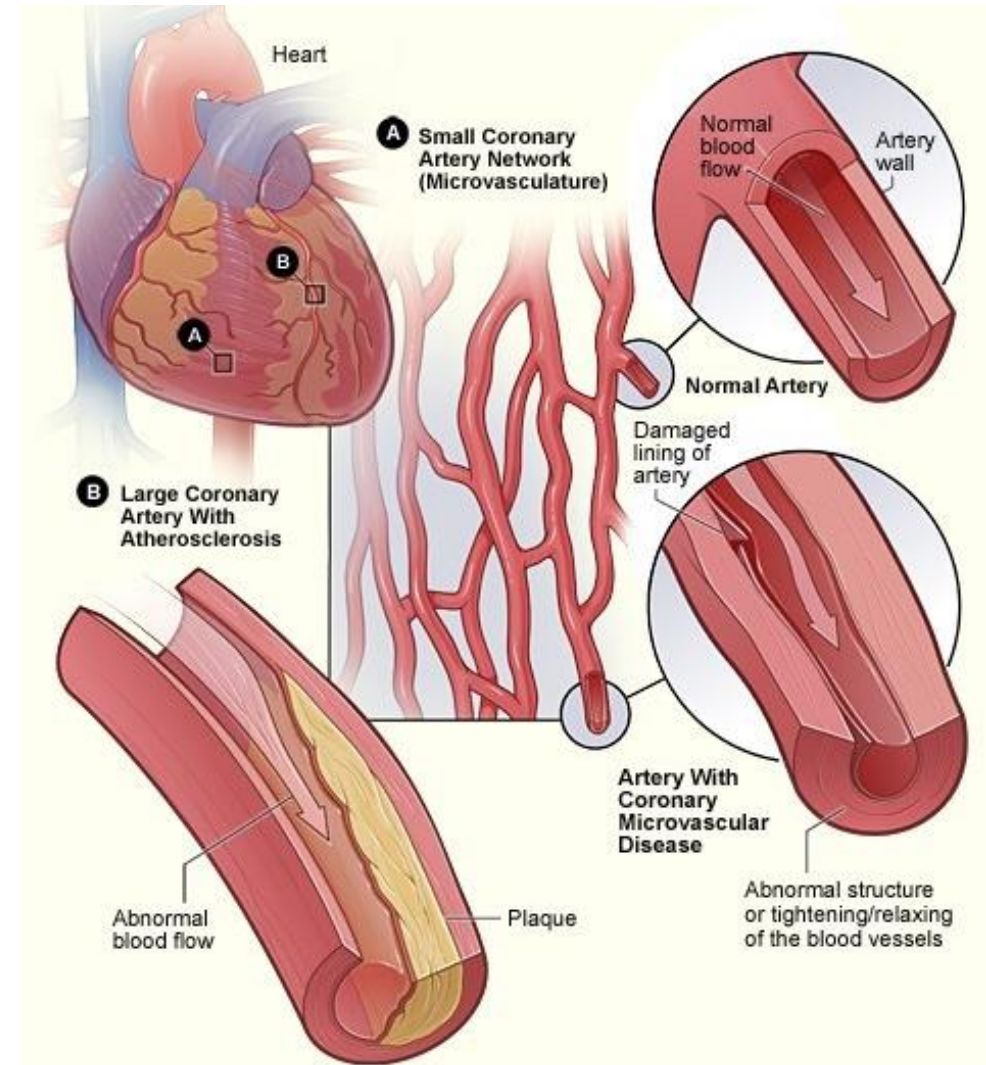
Notice Any Similarities?



Machine or Man?



- Exceeded service life, too many pressure cycles, flexing?
- Inner tube deteriorated, swelling/delamination caused by incompatible fluid
- Hose blisters, fluid incompatibility, or grease-like substances



Under Pressure

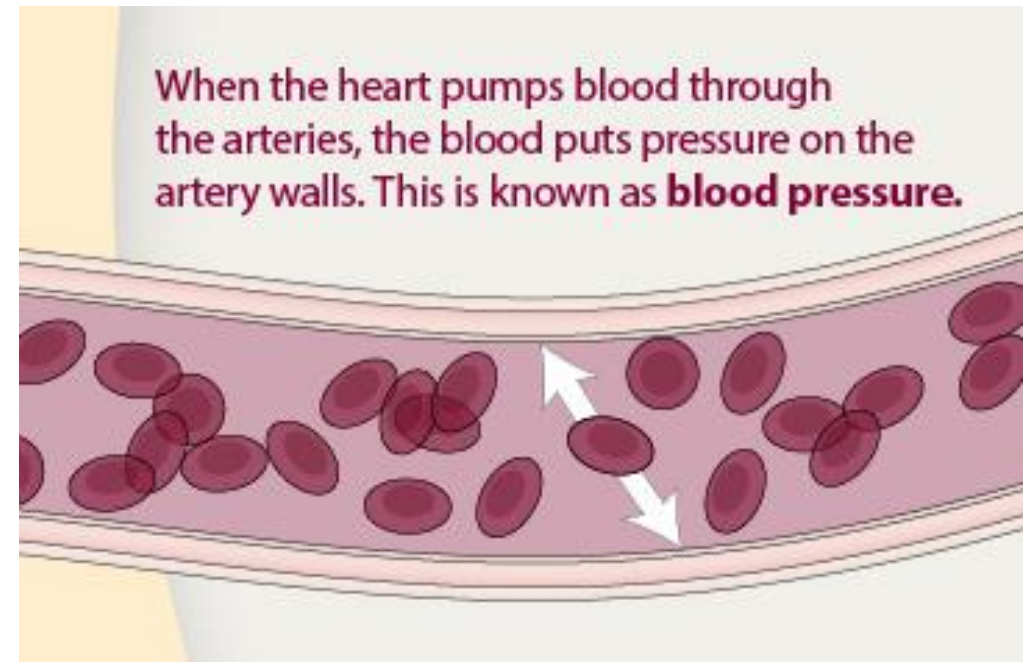
- Arteries carry blood from your heart to other parts of your body.



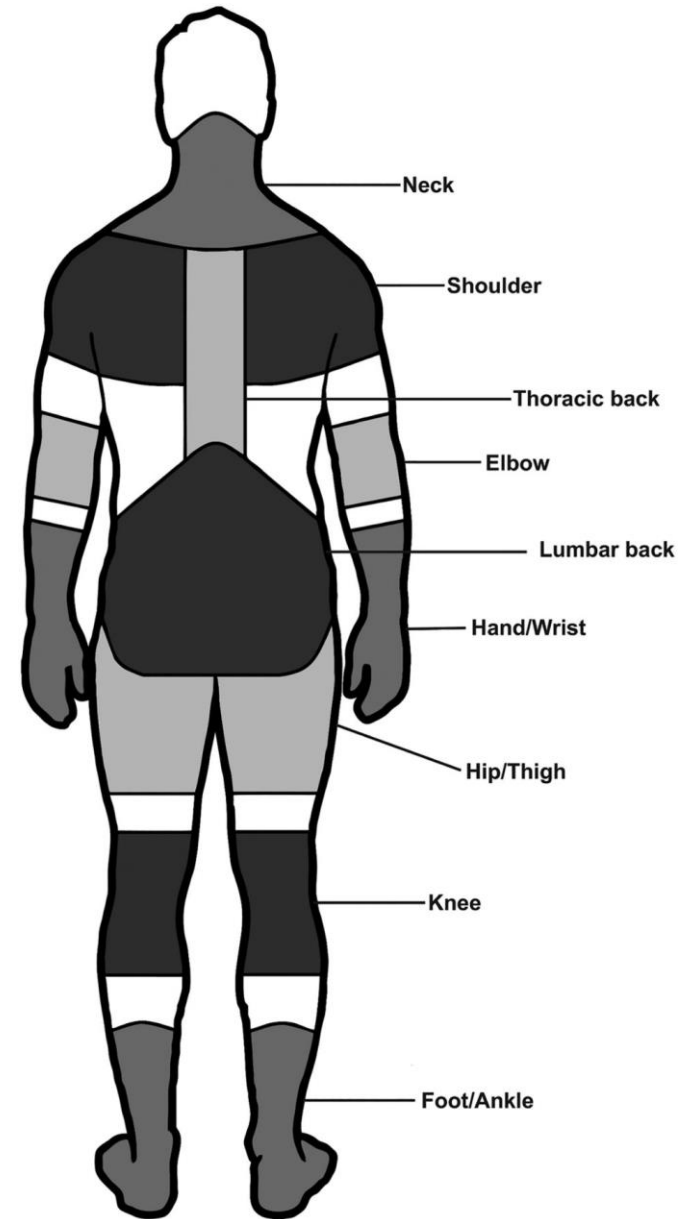
Systolic - the pressure in your arteries when your heart beats



Diastolic - the pressure in your arteries when your heart rests between beats



Please
indicate any
areas
where
you've been
hurt while
logging.



Musculoskeletal Issues and Chronic Disease

- Wear and tear on joints can impact our ability to do everyday activities

Examples include:

- Carpal tunnel syndrome
- Tendonitis
- Gout
- Arthritis

Loggers told us that:



Loggers Told Us

- High blood pressure is an issue many loggers struggle with
- Hearing loss is still happening
- Most don't drink in excess
- Less than 1 in 5 screened loggers smoked



How many hours of sleep
did you get last night?

LESS THAN 5

5-6

6-7

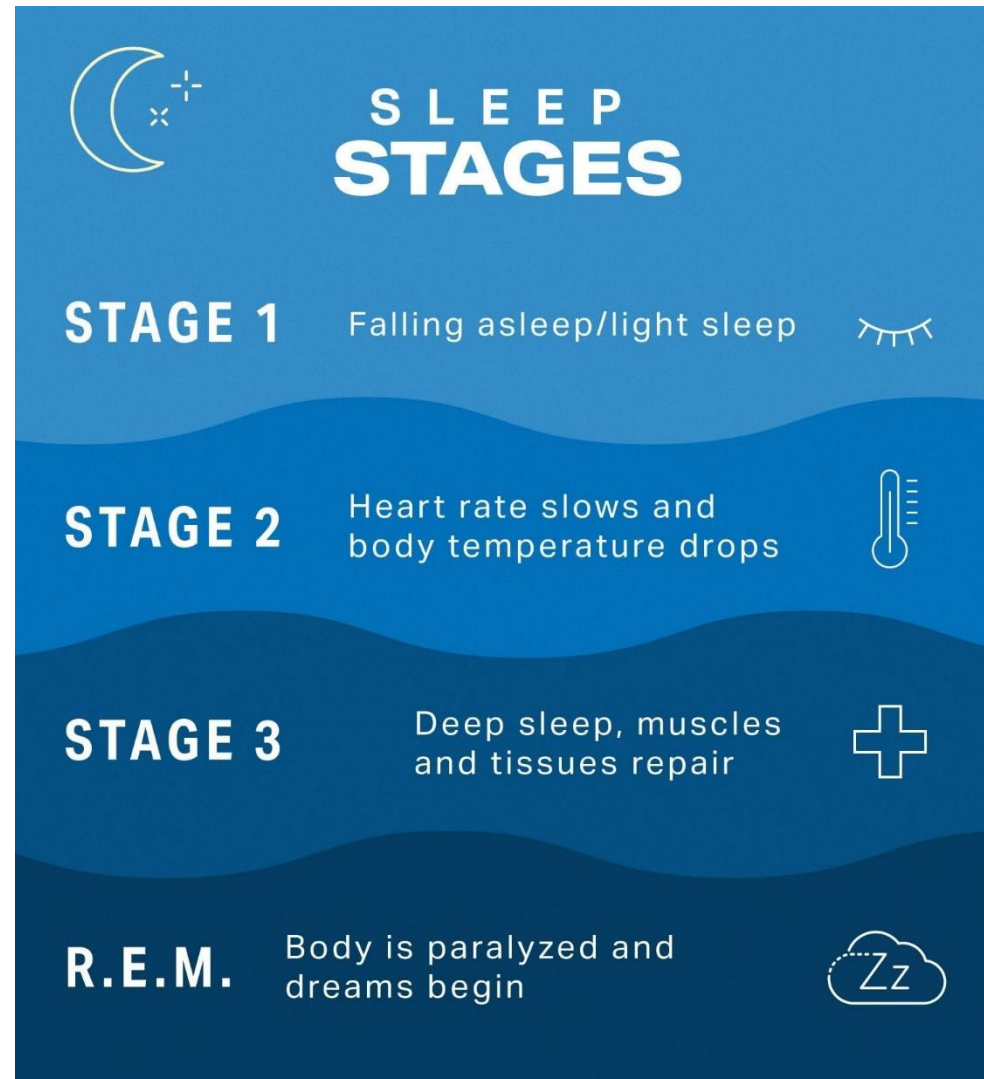
MORE THAN 7



Section 2: Sawing Wood...Not in the Forest

The importance of quality sleep

Sleep



Sleep, Continued



It can take 6-8 hours for caffeine to wear off



Alcohol prevents deep & REM sleep and may contribute to waking overnight



Nicotine keeps you awake, contributes to lighter sleep, and early wake-up (withdrawal)

- You may want to take action if:
 - You wake up feeling tired after getting enough sleep (7+ hours)
 - You wake up repeatedly overnight
 - Excessive snoring, gasping for air might be a sign of a sleep disorder



How to Improve Sleep Quality

- Avoid screens before bed
- Turn down the lights
- Keep the room cool



Blocking light from blinking lights
Electrical tape is handy!

<https://mantasleep.com/products/manta-sleep-blackout-stickers>
<https://www.howtogeek.com/244840/how-to-dim-the-blinding-glare-of-your-gadgets-led-lights/>



Blocking light from windows

<https://i.redd.it/79dqmw013o981.jpg>



Notice how people are sitting around you...

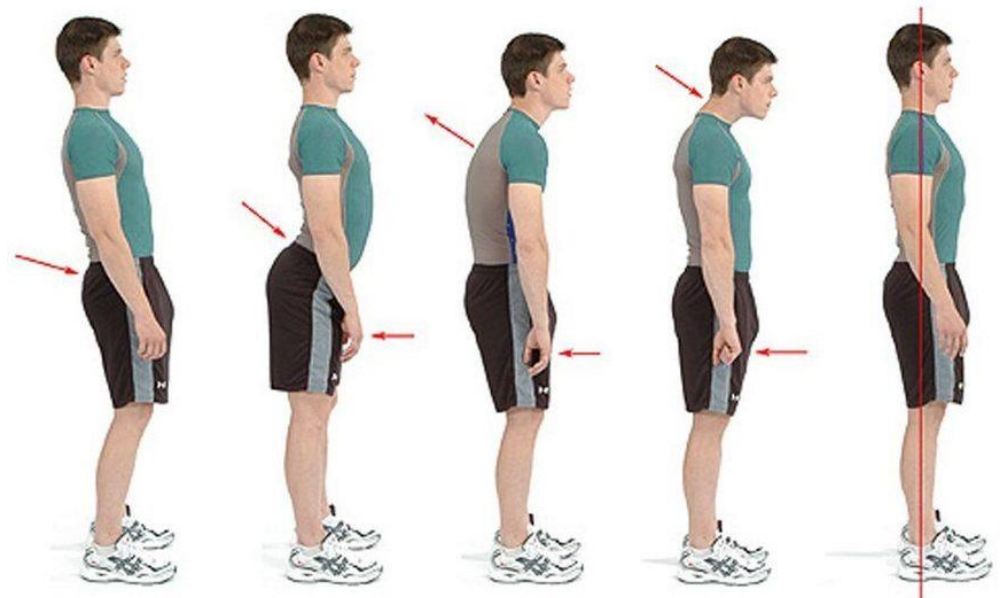
How would you rate your posture?

GREAT

GOOD

NOT BAD

MY MOTHER WOULD BE ASHAMED



Sway
Back

Lumbar
Lordosis

Thoracic
Kyphosis

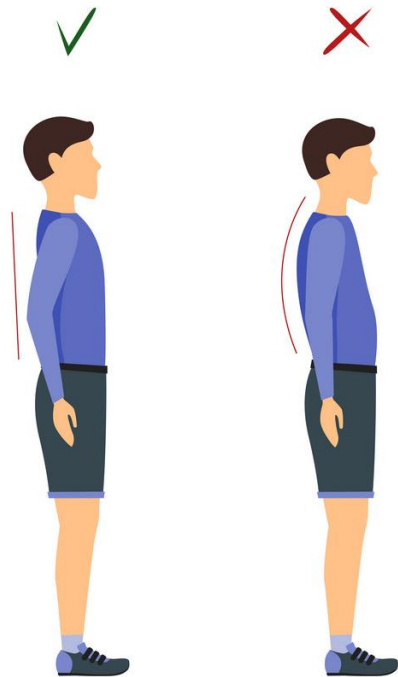
Forward
Head

Good
Posture



Section 3: Why Does Posture Matter?

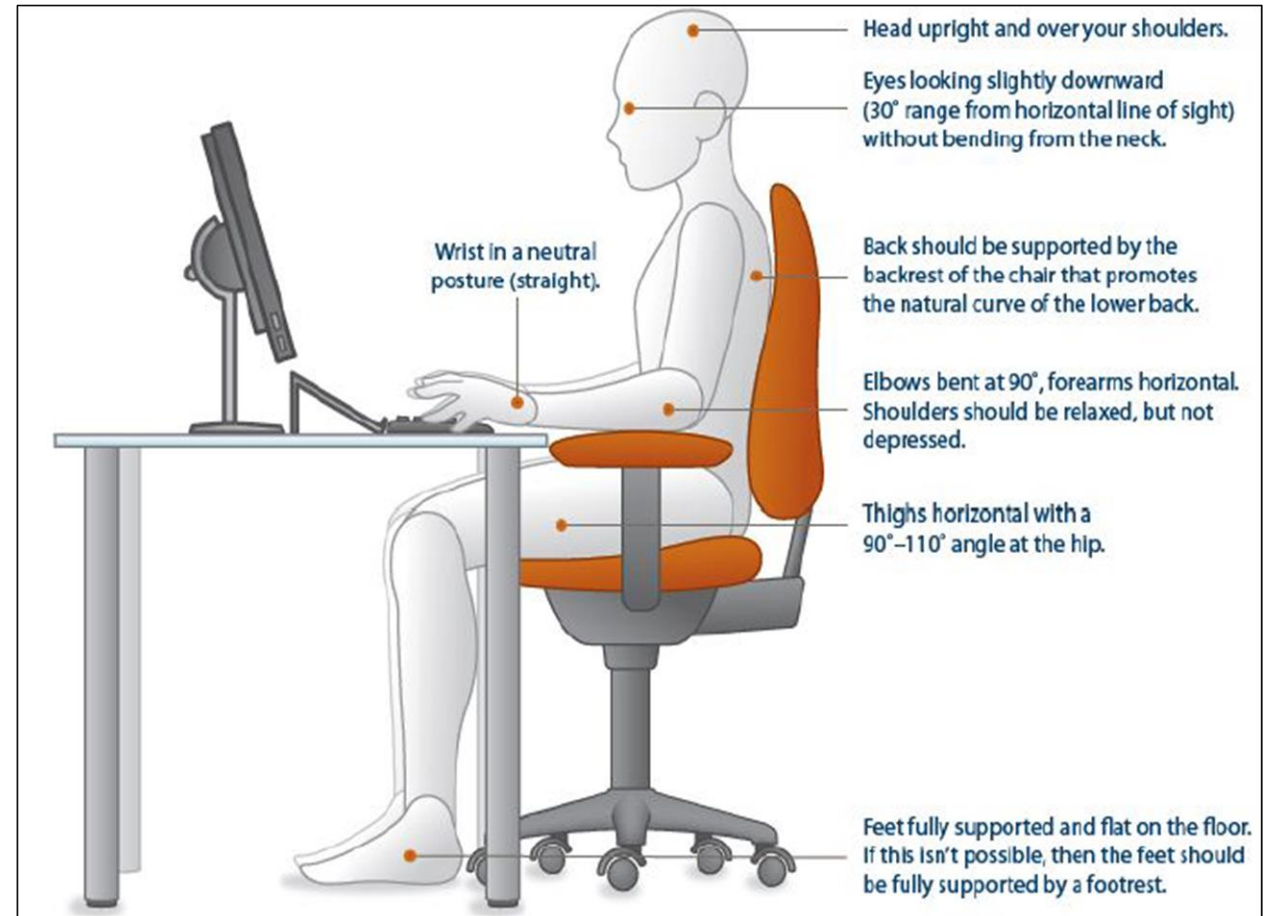
What Does Good Posture Look Like?

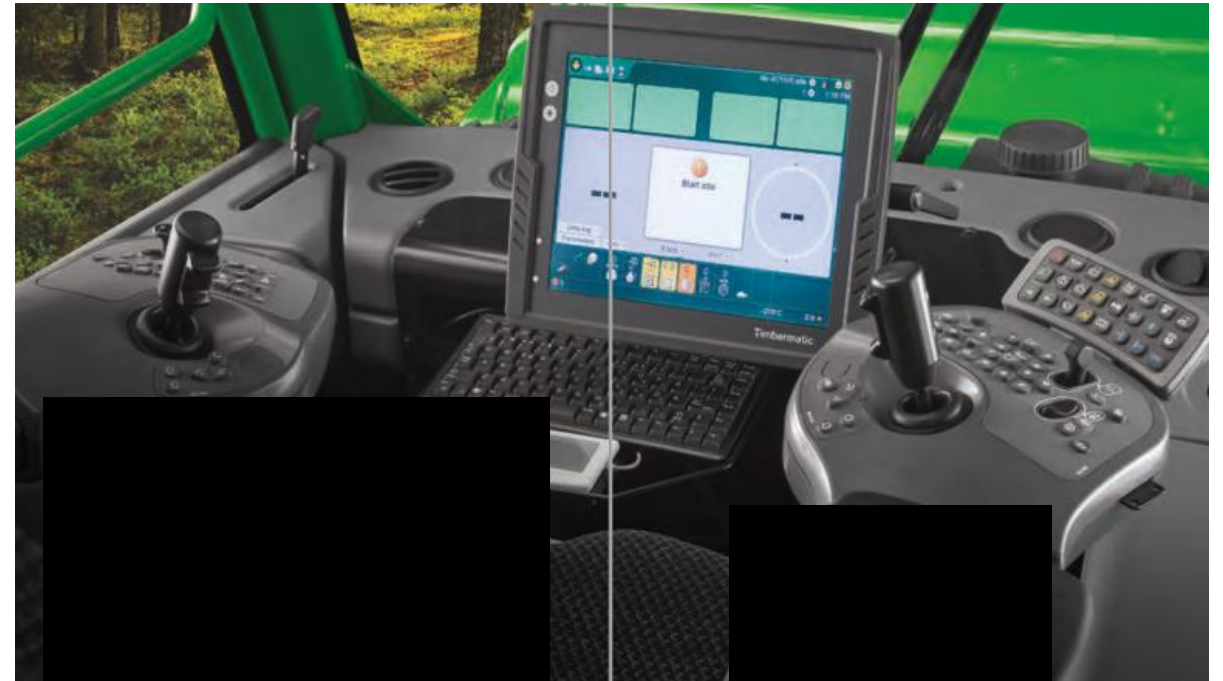
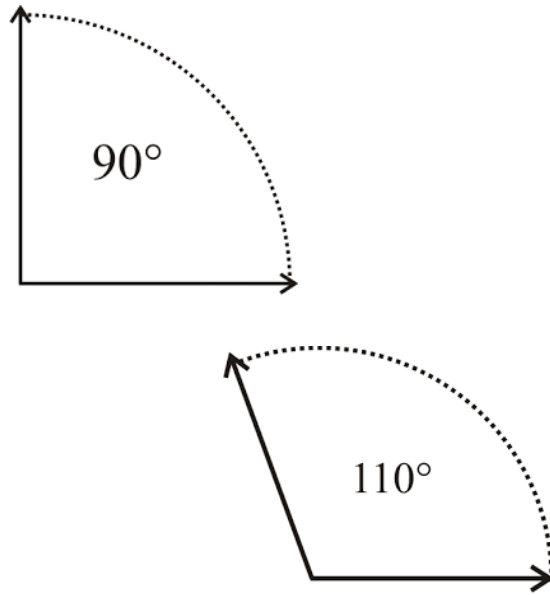


Office Ergonomic Ideas Adapt to Logging

- Take Breaks / Stand Up
- Move Often
- Stretch

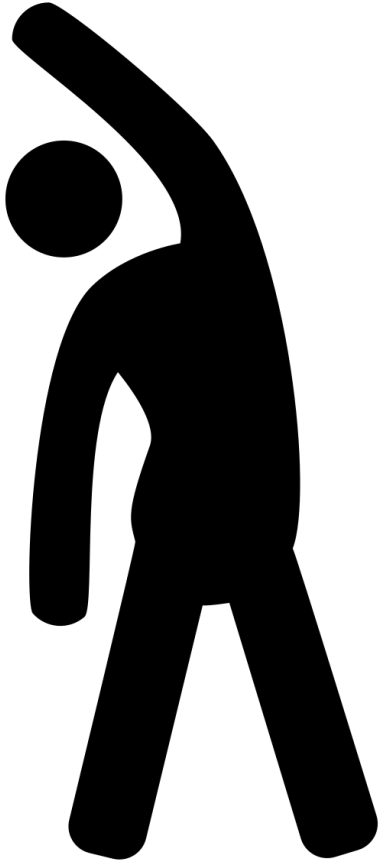
When possible, try to stand up and move for 5 minutes every hour.





Source: John Deere, Ponsse, Tigercat

Staying Limber



- Stretching keeps the muscles
 - Flexible
 - Strong
 - Healthy
- Without it, the muscles shorten and become tight
 - Weak
 - Unable to extend all the way
 - At risk for joint pain, strains, and muscle damage

Chest- Fight the Slouch



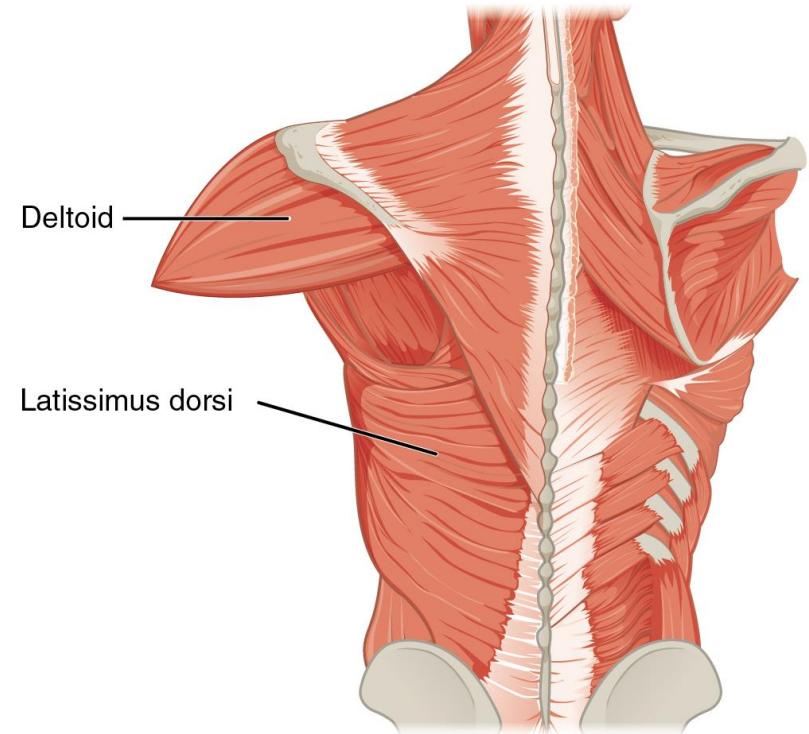
Lower Back



Hamstring Stretch



Lat Stretch



https://cnx.org/contents/FPtK1zmh@8.108:y9_gDy74@5

Forward Stretch



Quadricep Stretch

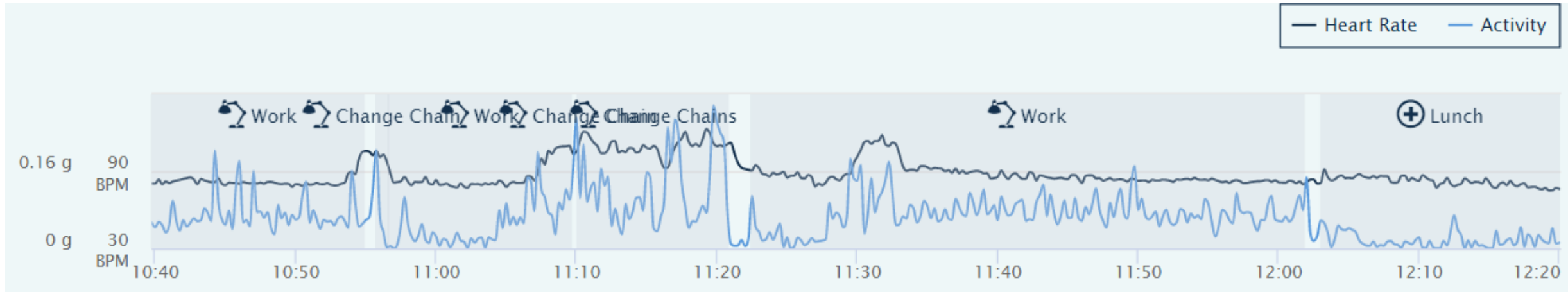




Section 4: Exercise

It's not always about running a marathon or becoming an Ironman...

Benefits of Exercise



- Different job tasks can burn different amounts of energy

Example from our pilot research

50 minutes of machinery maintenance = Nearly 400 calories burned
10 minutes spent changing a processor chain = Nearly 100 calories burned

Ways to Incorporate More Movement

- Hunting
 - Bonus points for walking vs. ATV
- Fishing
 - Bonus points for rowing vs. trolling motor
- Golf
 - Bonus points for no golf cart
- Trap/Skeet/Sporting Clays
 - Bonus points for picking up unbroken birds
- Biking
 - Mountain or Road
- Playing outside with your kids, nieces/nephews, grandkids
- Walks/hikes
- Yardwork
- Washing/waxing your truck
- Making firewood/stacking
- Home improvement
- Paddle sports
- Snow sports (snowshoe, XC ski)
- Shoveling snow

What's your favorite way to
be active?



Section 5: Fueling Up

Selective thinning of what we eat

Does This Look Familiar to Anyone?

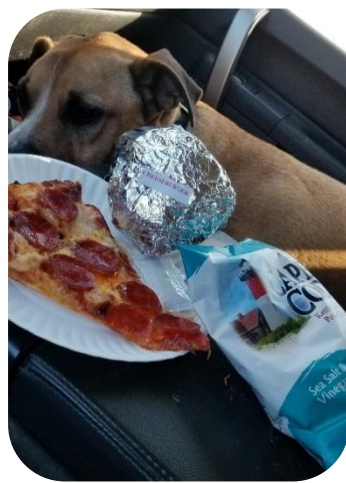


Aim For...

- Top three food groups:
 - Vegetables
 - Fruits
 - Seafood
- Bottom three food groups:
 - Grains*
 - Processed/smoked/charred meats
 - Caloric condiments (mayonnaise, coffee creamer, BBQ sauce, etc.)

Ask Yourself...

Rule of thumb: “If I harvested this plant or hunted this animal, would the food I got from it resemble this food?”



Calories and Fullness

- Caloric Density: Calories per unit of weight/volume
- Fullness Factor: Describes the loss of appetite after eating

Bagel w/ 1 tbsp. Cream Cheese:
294 Calories

2 Scrambled Eggs with 1 Slice Cheese
and 2 Slices Bacon: **290 calories**

Fullness Factor

- Bagel: 2.0
- Cream Cheese: 1.3

Fullness Factor

- Eggs: 2.3
- Bacon: 2.1
- Cheese: 2.3

Protein




- Building blocks of muscle, collagen, keratin
- Body spends more energy burning protein than other sources
- Sources of protein
 - Protein powder
 - lean fish and meats
 - fatty meats (steak, pork chops)
 - meat substitutes like tofu
 - Plant sources like lentils, beans, and almonds



Dietary Fiber

- Increases fullness
- Cleans arteries
- Aids digestion



- Soluble fiber - gets absorbed into the bloodstream and increases heart health
 - Insoluble fiber - improves digestive health
 - Helps to have good  and reduces risk of intestinal illnesses like colon cancer and inflammatory bowel disease
 - Both types of fiber reduce your risk of cancer
-  Soluble fiber sources: oatmeal, nuts, beans, lentils, apples, blueberries
-  Insoluble fiber sources: wheat, couscous, brown rice, legumes, carrots, cucumbers, tomatoes

Fats



Unsaturated Fat

- Liquid at room temperature
- Improve blood cholesterol
- Ease inflammation
- Olive oil, avocados, nuts, seeds, fish, and canola oil



Saturated Fat

- Solid at room temperature
- Impact to heart health is in debate - may not be bad, but still not good



Trans Fat

- Unsaturated Fat which has been stabilized*- ideal for **fried** food.
- Raise bad cholesterol and lower good cholesterol
- Create inflammation (contribute to heart disease, stroke, diabetes, etc.)
- Contribute to insulin resistance

Hydration

Water

- 8 full glasses/day for men, 6 for women
- Dehydration symptoms
 - Fatigue
 - Confusion/Short term memory loss
 - Mood changes



Coffee/Tea

- 3-5 cups/day associated with reduced risk in several chronic diseases.
 - Drink less if you struggle with blood pressure



Drink in Moderation:

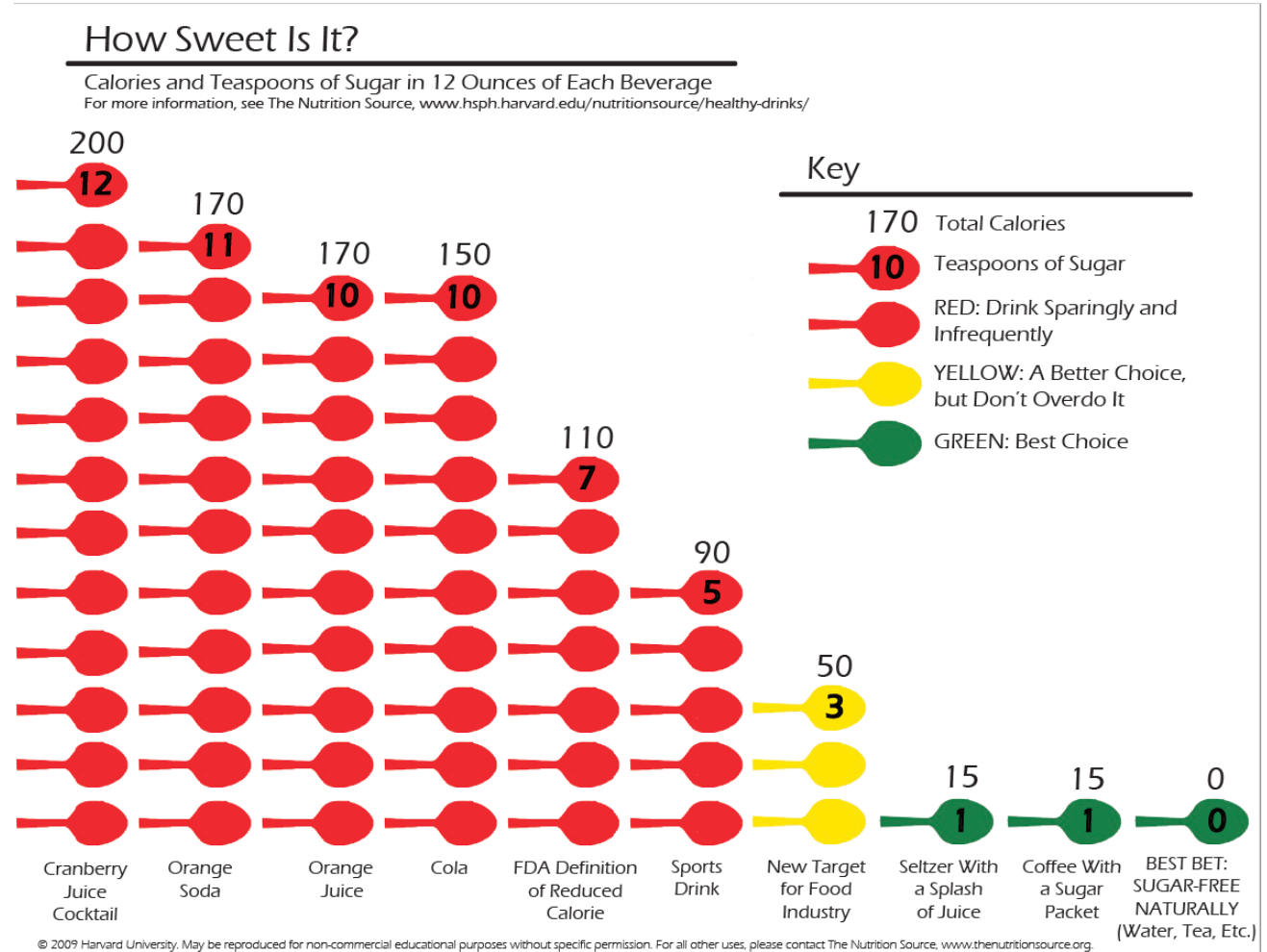
- Artificially sweetened drinks
 - Jury is out on long-term health effects, and may actually condition you to select sweet foods
- 100% Fruit juice
 - High in calories, low in fiber
 - Good vitamin content
- Milk
 - Only 1-2 glasses/day are useful
- Alcohol
 - Moderate drinking can be healthy for **some** people
 - Can disrupt sleep



Sugary Beverages

Soda, energy drinks, tonic, fruit punch, lemonade, etc.

- 7-10 tsp sugar
- Low nutrition and high calories
 - Rank lowest on Harvard's beverage health ranking



Vitamins and Minerals

Good sources of the most common nutrient deficiencies in U.S.

	B6	D	C	B12	A	E	Folate (B9)
Beef Liver	x	x		x	x		x
Citrus	x		x				x
Cruciferous Vegetables			x		x	x	x
Dark Leafy Greens	x				x	x	x
Eggs		x		x	x		x
Fortified Cereals	x	x		x			x
Fortified Dairy		x		x			x
Fortified Orange Juice		x	x				x
Tuna	x	x		x			x
Salmon	x	x		x			x
Bell Peppers			x		x	x	

Ideas for Shelf-Stable Foods

- Protein: Protein bar, hard boiled eggs, jerky, cheese, nuts
- Healthy fats: Nuts, sardines in olive oil, olive oil/canola oil mayo
- Carbohydrates: Whole grain crackers, breads, wraps (fiber, protein, and a bit more nutrition – greater fullness)

Too many processed foods and drinks can make us feel crappy.

Small changes can make a big difference

Hack Your Gas Station Run (or TV Dinner)

- Too much sodium → high blood pressure, heart disease
 - Balance out by eating foods with potassium (bananas, citrus, etc.)
 - Potassium and sodium work together, helps balance out high sodium
 - Don't overdo it: if sweating too much, replenish sodium
- Add canned protein, nuts, or veggies to store-bought foods
- Roasted vegetables are an easy nutrition source that can be made quickly
- Keep bagged salads, romaine hearts, carrots on hand
 - Add cheese, nuts, beans/hummus to bulk out

Parting Thoughts

- We should put as much effort in maintaining our bodies as we do our trucks/equipment
- Feeling healthier may make work easier
 - More energy
 - Increased mental sharpness
- Most important, feeling healthier allows you to enjoy time outside of work!

THANK YOU FOR YOUR TIME!

