

Ski & Mountain Trauma Conference
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Nutrition & Wellness: Keeping Yourself off the Gurney!

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Faculty Disclosure

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On the Chopping Block...



- **The American lifestyle:** Dietary statistics, heart disease
- **Nutrition 101:** Nutrients, ETOH, calories
- **Plants, animals, & sugar:** Facts, medical statistics
- **Agency/Dept wellness:** Are you ready?
- **Implement change:** Healthy modifications, easy swaps
- **Movement:** Recommendations, examples
- **Avoiding the gurney:** Tips, tricks



The American Real Deal

America has the largest number of fast food chains in the world at 196,839. 1/3 of Americans are eating fast food on any given day ⁽⁵⁾

47% of Americans have at least one of these three risk factors for heart disease: smoking, high blood pressure, or high cholesterol ⁽⁴⁾

42.5% of U.S. adults aged 20 and over have obesity, including 9.0% with severe obesity.

Another 31.1% are overweight. ⁽²⁾

3 year study in MA revealed more than 75% of emergency responder recruits were overweight or obese ⁽³⁾

America's alcohol intake is higher than average worldwide. It accounts for 10% of the global total, yet we make up only 5% of people on Earth





Per the CDC:

In the United States, someone has a **heart attack** every 40 seconds

One person dies every 34 seconds from heart disease...



Heart disease costs about **\$229 billion** each year



... which is 697,000 people in 2020

Heart disease is the **#1** cause of death in both men and women in the US



Nutrition 101

Carbohydrates Macro Cheat Sheet

Breads				
Rice				
Couscous				
Cereals				
Bran				
Potatoes				
Pasta				
Oats				
Cream of Wheat				
Corn				
English Muffins				
Pancakes				
Whole Wheat/				
Whole Grains				
Vegetables				
Squash				
Pumpkin				
Berries				
Fruits				
Sugars				
	Beans		Eggs	
	Sprouted	Chicken	Salmon	Acocado
	Grains	Turkey	Bacon	Nut Butters
	Quinoa	Egg Whites	Chia Seeds	Egg Yolks
	Most Yogurts	Fish	Cottage Cheese	Nuts
	Skim Milk	Buffalo	Whole Fat Milk	Oils
	Peas	Bison	Duck	Olives
		Whey Protein	Whole-Fat Yogurt	Flaxseed
		Turkey Bacon		
		Lean Beef		
		Low/Non-fat cottage cheese		
		Low/Non-fat greek yogurt		

Fats

LiveLifeActive.com

MACROS

Fat: 1g = 9 calories

Carbs: 1g = 4 calories

Protein: 1g = 4 calories



* Don't forget when it's 5 o'clock somewhere...
Alcohol: 1g = 7 calories



MICROS: Vitamins & Minerals

The Animal World

Research shows that men who consume 3 or more servings of dairy products a day have a 141% higher risk for prostate cancer death compared to those who consume less than 1 serving.



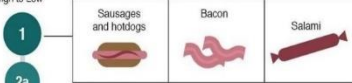
plantbasednews.org

WHO classification of processed meats

IARC* Carcinogenic Classification Groups

Likelihood causes cancer High to Low

Causes cancer: Processed meats including



1

2a

2b

3

4

IARC Classifications

GROUP	WHAT IT MEANS	EXAMPLES
Group 1	There is sufficient evidence the agent causes cancer in humans.	Solar radiation, processed meats, alcohol, beverages, smoking, asbestos, lead-based baby powder, concentrated nitrosamines

Carcinogenic to Humans

One 50-gram serving of processed meat per day increases colorectal cancer risk by 18%.



Physicians Committee
for Responsible Medicine

Dairy is NOT a Health Food



- According to the NIH, approximately **65% OF THE GLOBAL POPULATION IS LACTOSE INTOLERANT.**
- Research published this year found that a single milkshake mangled red blood cells and increased risk of chronic heart disease.
- A dairy allergy is the result of an immunological response cows' milk proteins
- **ASTHMA**, the most common chronic disease in children, **CAN IMPROVE IN AS FEW AS 8 WEEKS WHEN EGGS AND DAIRY ARE REMOVED FROM THE DIET.**
- Insulin Growth Factor 1 (IGF-1), a growth-stimulating hormone, **CONNECTS DAIRY TO ACNE, ECZEMA, OBESITY, HEART DISEASE, AND MULTIPLE CANCERS.**

SWITCH4GOOD SWITCH4GOOD.ORG



The Plant World



A daily intake of 5 servings of fruit/vegetables is associated with:

- 35% lower respiratory disease mortality
- 13% lower total mortality
- 12% lower CVD mortality
- 10% lower cancer mortality

(Nurses' Health Study and Health Professionals, 2014)

Just 3 weeks on a plant-based diet composed of mostly whole grains, vegetables, and beans, participants received a 10% drop in BP, a 35% drop in LDL cholesterol, and a 38% drop in fasting blood sugars.

AND

Plant-based diets have been shown to lower cholesterol just as effectively as first-line statin drugs, without the risks

(nutritionfacts.org, 2019)

There is only one way of eating that's ever been proven to reverse heart disease in the majority of patients, and that's whole plant foods

(Dr. Dean Ornish)



Sugar's Bitter Truth

Added sugar is put in during processing.

It comes in many forms...which is why it's hard to identify on labels. There are at least

61 different names for sugar listed on food labels

Sneaky examples: sucrose, high-fructose corn syrup, barley malt, dextrose, maltose rice syrup, maltodextrin



Good Sugars

- These are found in fruits and vegetables, dairy and wholegrains
- They are absorbed slowly into the system over a period of time (sugar high avoided!)
- Good sugars are loaded with additional vitamins and nutrients
- Good sugars can be converted into energy
- Good sugars help support your body to function and be active

Bad Sugars

- Bad sugars live in processed foods like white bread, pastas, cakes, and soft drinks
- Bad sugars are absorbed quickly into the system (hello sugar high!)
- Bad sugars are high in calories and have limited nutritional impact
- Bad sugars don't fill you up & increase cravings
- Bad sugars can cause health problems, like type 2 diabetes, and tooth decay

Wellness: Are You Ready?



In order to create change, you have to **LEARN** and **AGREE** that:

- ✓ Food is fuel
- ✓ You have control over your lifestyle. Every bite and purposeful movement is a choice
- ✓ You want to be healthy for yourself, your family, your crew, and your patients
- ✓ You need to combine fuel and movement to create a healthy lifestyle



Implement Change

FAT

- Spray/spritz oil. Not PAM!
- Water or broth to saute
- Avo instead of mayo
- Decrease dairy
- Plant based butter

Baking Subs

- Applesauce
- Mashed banana
- Canned pumpkin
- Plant based butter
- Flax egg



PROTEIN

- Chicken, turkey, natural sources
- Avoid processed meats
- Limit red meat

Or, even healthier:

- lentils, beans, peas, soy, tofu, tempeh

You don't have to be
vegetarian to eat
more plant based!

Implement Change

- Eat what's season and on sale
- Pick a new recipe weekly
- Change cooking styles
- Use greens for filler



HEALTHY CARBS

- Potatoes: sweet potatoes, rutabaga
- Rice: brown rice, risoni, cauliflower rice
- Buns/breads: whole wheat varieties, lettuce wraps, cauliflower crusts, portabellas, lavash
- Pasta: whole wheat, spaghetti squash, spiralized veggies, edamame pasta, chickpea pasta

Monkfruit



Chemicals? No thanks!

DIRTY DOZEN

Strawberries
Spinach
Peaches
Pears
Nectarines
Apples
Grapes
Cherries
Green beans
Blueberries
Bell/hot peppers
Kale/collard greens



Shop Smart!

CLEAN 15

Avocado
Sweet corn
Pineapple
Onions
Papaya
Sweet Peas (Frozen)
Asparagus
Honeydew
Kiwi
Cabbage
Mushrooms
Mangoes
Sweet Potatoes
Watermelon
Carrots



Add in Movement



A movement mindset isn't just about exercising...

If you move well, you also think, feel, and live well

It's proven that healthy movement helps us:

- Feel well, physically and emotionally
- Function productively
- Think, learn, and remember
- Communicate and express ourselves
- Connect and build positive relationships with others

"Exercise" is just an artificial way to get us to do what our bodies have, for most of human history, known and loved - regular movements that we lost as we matured as a species



Recommendations

2.5 hrs/week

Moderate-intensity aerobic activities:

- Brisk walking (>2.5 miles per hour)
- Easy jogging
- Biking <10 miles per hour
- Weight machines
- Mopping floors
- Water aerobics
- Gardening

OR

1.25 hrs/week

Vigorous intensity activities:

- Carrying heavy equipment
- Biking >10 miles per hour
- Jumping rope
- HIIT exercises
- Running
- Swimming laps
- Heavy yardwork
- Hiking

PLUS....
3x/week



Don't Become a 911 Call...



Read labels: Watch serving sizes, calories, macros, and lengthy ingredients

Meal prep: Bulk cook and pack meals/snacks that are whole foods and minimally processed

Eat consistently: Small balanced meals keep your metabolism burning

Make smart swaps: Hard boiled eggs and fruit at 7-11 and in breakrooms, instead of slurpees, chips, and donuts. Salads and grain bowls in hospital cafeterias and to-go orders. Plant protein in addition/in place of meat

Move: Create a healthy routine, including strength training 3x week. Set a step goal.

Stay hydrated: Aim for 100oz of water daily



HEALTH:

A state of complete physical, mental, and social well-being



As one big **Emergency Medical Services** family, let's practice what we preach

THANK YOU!



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