

2022 NSCA TACTICAL ANNUAL TRAINING #NSCATactical22

CONFLICT OF INTEREST STATEMENT

I currently have, or I have had in the past 2 years an affiliation or financial interest around this presentation, including:

Megan Lautz

- Contractor for Fairfax Fire & Rescue
- Former contractor for Montgomery County Public Safety
- Firefighter Nutrition Consultant through RescueRD LLC

Katie Dennison

- Master Firefighter for Montgomery County Fire & Rescue

KATIE DENNISON

Master Firefighter
with MCFRS

MS in Exercise
Physiology

@Katie_Dennison



MEGAN LAUTZ

Civilian Dietitian
with FCFRD

MS Sports
Nutrition

@Rescue.RD



Hyperfocus on Firefighter Health Risks



HEART DISEASE

47% of line of duty deaths



CANCER

27% of all cause lifetime mortality



MENTAL HEALTH

5x more likely to suffer from PTSD



OBESITY

Higher muscle mass (BF% > BMI)

**OMG! ALL
Firefighters
NEED to go:**

**VEGAN
VEGETARIAN
INTERMITTENT FAST
CUT OUT ALL SUGAR
CUT OUT ALL SODIUM**



Spark Firefighter Wellness in Every Career Stage
Megan Lautz, MS, RD, CSCS, TSAC-F | Katie Dennison, MS, TSAC-F

**2022 NSCA TACTICAL
ANNUAL TRAINING**



Address firefighter
health risks



Solve pain points of
the individual



Hyperfocus on
firefighter lifestyle

Health risks should **INFORM** our initiatives.
The hyperfocus should be on the **LIFESTYLE**

SEASONS OF A FIREFIGHTER CAREER



RECRUIT

6 MONTHS

- ↑↑↑ physical activity
- ↑↑ calorie intake
- ↓ weight/body fat

Regular PT & drills

Limited mealtimes

Sig. increase in activity during fire suppression



ROOKIE

6 MONTHS

- ↑ physical activity
- ↑ calorie intake
- weight/body fat

May continue PT, drills

Station maintenance

Diet influenced by chef/colleagues



FIREFIGHTER

20+ YEARS

- ↓ physical activity
- ↑ calorie intake
- ↑ weight/body fat

FF, Tech or Master

Injury, PTSD, Divorce?

Promotional tests, medic training, mandatory OT



PROMOTION

5-10+ YEARS

- ↓↓ physical activity
- ↑ calorie intake
- ↑ weight/body fat

Lieutenant or Captain

Still in the station, but more desk/car bound

Eating out or on the go



LEADERSHIP

5-10+ YEARS

- ↓↓↓ physical activity
- ↑↑ calorie intake
- ↑ weight/body fat

Chief

High level responsibilities

Desk/car bound

Eating out or on the go



RECRUIT FITNESS

CHALLENGES

Diverse fitness levels & training backgrounds

In-season status

Fitness Trainers (varying backgrounds from certified to “volun-told” firefighters)

Rhabdomyolysis, shin splints, plantar fasciitis

Recovery during fire suppression (“sore”)

SOLUTIONS

Movement pattern-based training

Assessment/testing

Communication with academy staff (planned recovery)

Relationship with sports med / dept. health providers

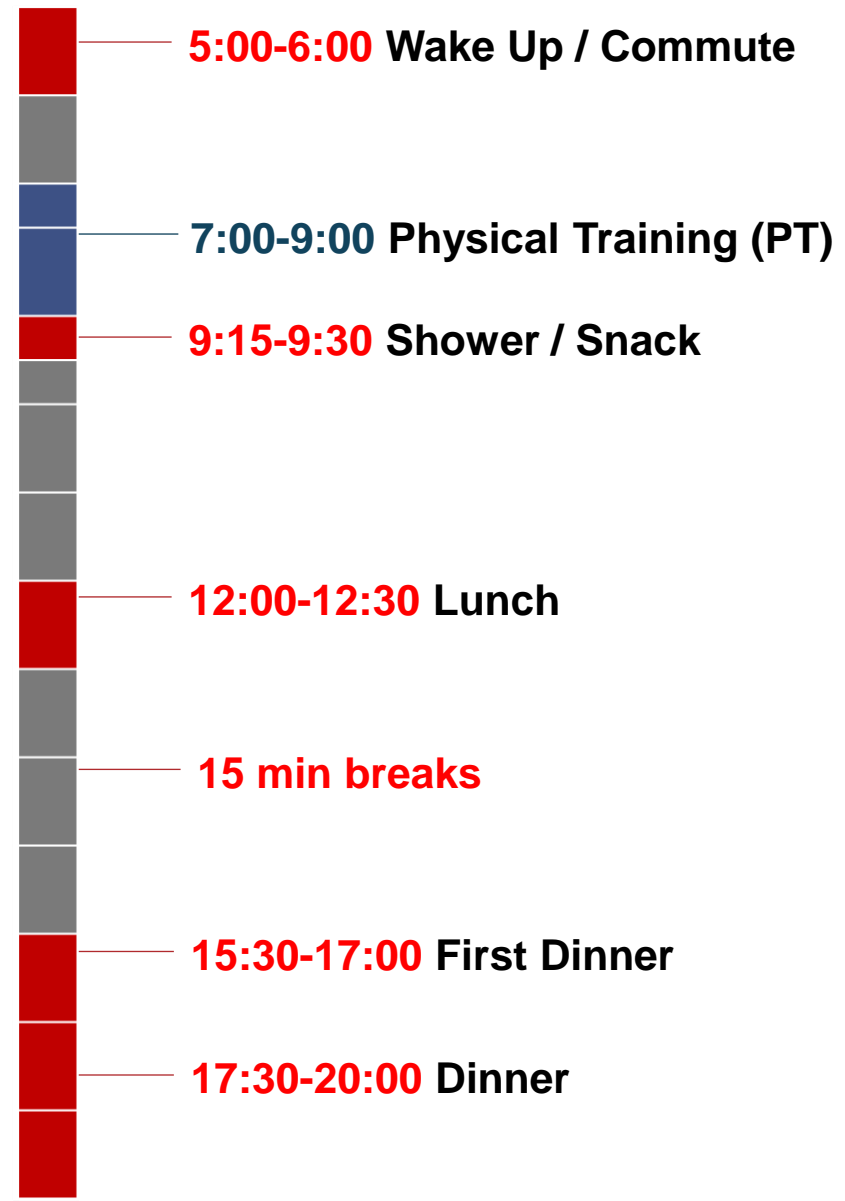
Education on verity of fitness modalities & progression /regression



RECRUIT
NUTRITION

CHALLENGES

- Limited meal times
- Nausea/vomiting (PT)
- Urgency to go (PT)
- Muscle cramps
- Low energy
- Exertional Rhabdo
- Headaches or weight loss during fire suppression





SOLUTIONS

Eat carbs and drink 16-32 oz fluid pre-PT

Limit fat, protein, fiber, & sugar alcohols pre-PT

Sports Drink or Liquid IV during PT (salty sweater)

Rhabdo / Hydration education

Increase calories & Liquid IV during suppression

5:00-6:00 Wake Up / Commute

Carb based breakfast (smoothie, toast, fruit, egg sandwich, Gatorade)

7:00-9:00 Physical Training (PT)

9:15-9:30 Shower / Snack

Protein + Carb pairing (protein shake + fig bar, protein bar + fruit)

12:00-12:30 Lunch

Protein + Carb + Veggie
May have limited microwaves

15 min breaks

Quick snacks – nuts/seeds, pre-cut fruit, applesauce pouches, granola/protein bars

15:30-17:00 First Dinner

Fire suppression – wrap or snack

17:30-20:00 Dinner

Healthier fast food, frozen, and quick options



ROOKIE FITNESS

CHALLENGES

Major life change to shift
work & station life

Little control over
scheduling of fitness

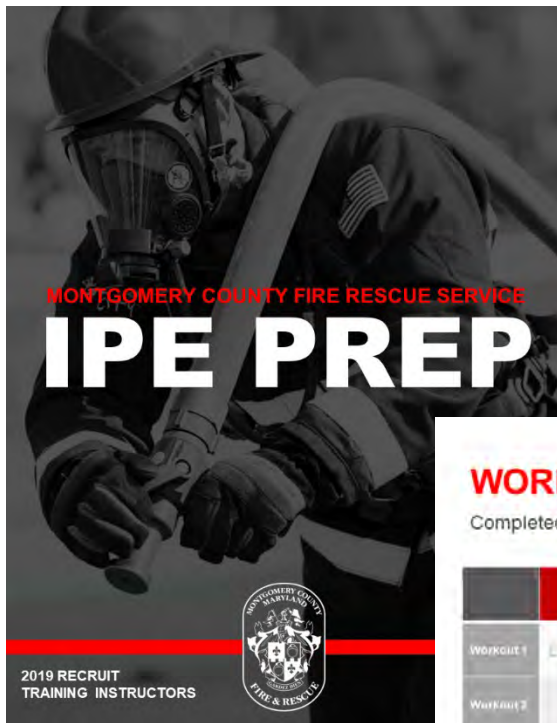
SOLUTIONS

Tools to find **enjoyable
fitness modalities** &
known education of
movement patterns
during academy

Ability to dictate workouts
via workout logs &
programs fitness testing
to get off of probation



ROOKIE FITNESS



WORKOUT 1

Completed on the first shift of the month for six months.



	Front Squats 3 sets/10 reps	Step Ups 3 sets/10 reps	Row 3 sets/10 reps	Arnold Press 3 sets/10 reps
Workout 1				
Workout 2				
Workout 3				
Workout 4				
Workout 5				
Workout 6				

AMRAP

Complete as many rounds as possible in 20 minutes.

- 1 Farmers Carry
(around the station, record weight)
- 2 Burpees
(10 reps)
- 3 Walking Lunges
(20 reps total)

Workout 1	Workout 2	Workout 3	Workout 4	Workout 5	Workout 6

SOLUTIONS

Tools to find enjoyable fitness modalities & known education of movement patterns during academy

Ability to dictate workouts via **workout logs** & programs fitness testing to get off of probation



CHALLENGES

Slow vs. Busy Station?

**Weight Gain vs.
Weight Loss?**

**Healthy Dinners or
“Brats & Tots?”**

Can they PT?

Can they cook?

24-hour shift adjustment

PTSD?

SOLUTIONS

**High fat snacks or dried
fruit for weight gain**

**Fruit / high fiber or protein
snacks for weight loss**

**Can they bring fruit or a
salad to share?**

**On shift days may be
a “rest” day**

**20 OR 90 min naps
& early therapy**



CHALLENGES

20+ year athlete

**Motivation & fitness
experience varied**

**Back, shoulder, neck,
or knee pain?**

Mental health?

SOLUTIONS

Create a culture of fitness

Get them out of pain

Workouts they enjoy

Work/life balance

**Easily accessible,
specific resources**

PT time in an SOP?



CHALLENGES

Injury (shoulder, back, knee, neck, PTSD)

Life Events (marriage, divorce, babies, sick parents)

Overtime?

Special Ops / USAR

Fad Diets

Hydration

Alcohol & Caffeine Use

SOLUTIONS

Physical, athletic, or behavioral health therapy

Quick, easy, portable meals

Emphasis on fiber, protein, fruits & veggies

Liquid IV in PIC Kits, gear, or on assigned units

Alternate alcohol with water



OFFICER FITNESS & NUTRITION

CHALLENGES

**May have started a family,
side jobs, or OT**

**Lack of mental and
physical energy**

**Promotional
tests are hard!**

**Many responsibilities
when promoted**

SOLUTIONS

**Flash cards while
walking on the treadmill
or foam rolling**

**Healthier fast or
frozen food guides**

**Contract out meal prep,
cleaning, or yard services**

**Power to impact crew
health**



LEADERSHIP FITNESS

CHALLENGES

A lot of responsibilities

**More sedentary than
earlier in their career**

High stress

Aging

SOLUTIONS

**Power to schedule fitness
times for dept?**

**Provide finances for
fitness training & gear?**

Stress management

**Lifelong fitness best
practice**

**Walking breaks
during the day**



CHALLENGES

Sedentary positions

**High mental energy,
low physical energy**

**Shift from 24 hour
to day work shifts**

SOLUTIONS

Watch reminders

**Try MyFitnessPal or a food
log for accountability**

**Healthier fast food or local
restaurant guides**



CHALLENGES

Ill-fitting gear

Height/weight challenges

Higher rates of infertility and miscarriage

Sedentary light duty assignment before leave

Return to work policy?

Breastfeeding policy?

Menopause?

SOLUTIONS

May need different form instruction

Focus on power training for CPAT

Focus on core and pelvic floor post-partum

Therapy post-partum (?)

May not need to increase calories during 2nd (+300) and 3rd (+500) trimesters

SO, YOU WANT TO WORK WITH FIRE?

UNDERSTAND THE RISKS HYPERFOCUS ON THE LIFESTYLE

NEEDS ASSESSMENT

- Take CPAT
- Observe burns and trainings
- Complete 12-24 hour ride alongs with different ranks

CREATE A POSITION

- Sell *specific* solutions
- Submit a formal proposal to a wellness battalion chief
- Wait and be persistent



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