Discover the Magic Bullet: 
*I Like To Move It Move It!*

Wednesday, October 17
3:25-4:40a.m.

Mark Zollitsch, Wellness Consultant,
Health and Benefits Services, Texas
Association of Counties

Participants will be able to:
Identify one common fitness myth;
Identify two ways fitness impacts how you feel and your health; and
Identify and implement three practical ways to build in exercise during your workday or facilitate fitness for county employees.
Mark Zollitsch, Wellness Consultant, Texas Association of Counties, Austin

Zollitsch is a wellness consultant for the Texas Association of Counties’s (TAC) Healthy County wellness program that serves nearly 200 members of TAC Health and Employee Benefits Pool. Before TAC, he directed the wellness and recognition program for a large multi-state nonprofit that helps children in need, and worked as the subject matter expert and wellness consultant for a major international services company where he helped industries and organizations of all sizes implement and manage wellness programs. Previously he built governmental wellness programs for Native Americans in the state of Washington. Zollitsch has a master’s degree in health and fitness education from Western Washington University and a bachelor’s in exercise science with a focus in nutrition.
Discover the Magic Bullet:

* I Like to Move It, Move It *

Presented by: Mark Zollitsch, Wellness Consultant

Do You Like to Move It?
Main Entry: magic bullet

Pronunciation: 'maj-ik-'bul-et

Function: noun

: a substance or therapy capable of destroying pathogenic agents (as bacteria or cancer cells) or providing a remedy for a disease or condition without deleterious side effects

Source: Merriam-Webster's Medical Dictionary, © 2002 Merriam-Webster, Inc.
If this one thing could be bottled, it would be a best-selling pill at the pharmacy.
And the Magic Bullet Is...

Simple...

Move Your Body

*The Gift that Keeps on Giving*

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**BUSTING COMMON MYTHS**
Common Fitness Myths

- I’m too old!
- The longer I go the more calories I burn, so more is better;
- Fitness is too expensive;
- Spot reducing
- My metabolism slows down as I age;
- Ladies risk looking like Arnold

Recent Science or Ancient History?

- Burn 800 less calories per day than 100 years ago
- Vocational changes
- Modern conveniences
- 34 Hrs. TV/screen time/week
WHY FITNESS? - BENEFITS

Known Feel Good & Beauty Benefits

- ↑ Energy
- Lowers Stress
- ↑ Sleep
- Increases Metabolism
- ↓ Migraines
- ↓ Anxiety
- Burns Calories
- Brain-Hormone Connection
- ↓ Depression – better than meds
- ↑ Serotonin & Endorphins
- ↑ Skin Health & Elasticity
- ↓ Wrinkles
- Transforms Body Shape
Cognitive & Physical Function Benefits

- ↑ Mental Acuity
- ↑ Memory Retention
- ↑ Spatial Relations
- ↓ Alzheimer's
- ↓ Dementia – up to 62% lower risk
- ↑ Balance, gait, reaction time

The Lymph-Sweat Connection

- Maintain Mobility
- Reduce Osteoporosis
- Increased Functionality
- Less Winded
- Less Physical Pain
- Flexibility

Known Health Risk Benefits

- Blood pressure
- Lipid profiles including particle sizes & triglycerides
- Good HDL
- Visceral fat at a given weight
- Digestion & Absorption
- Faster Elimination

- Lower markers of systemic inflammation
- Cardiac function
- Elastic blood vessels
- Heart rate variability
- Positive Brain Chemistry
- ↑ Insulin Sensitivity
Physical Activity and Health

Known Disease Prevention Benefits

- Cardiovascular Disease
- Heart Disease
- Overweight/Obesity
- Metabolic Syndrome
- Cancer Risk
  - Colon – 40%
  - Breast – 30%
  - Prostate
  - Lung
  - Others
- Diabetes
- Stroke & Vascular Disease
- Acid Reflux & Ulcers
- COPD & pulmonary Issues
Fitness and Heart Related Deaths

![Bar chart showing fitness levels and heart related deaths](chart.png)

Deaths per 1000

- low: 24.6 (male), 8.1 (female)
- moderate: 7.8 (male), 3.4 (female)
- high: 3.1 (male), 1 (female)

References:
- JAMA 262(17):2398-2402, 1989
- Arch Intern Med. 2005;165:2134-2150: Cardiorespiratory Fitness and Body Mass Index as Predictors of Cardiovascular Disease Mortality Among Men With Diabetes

Injury Prevention for Law Enforcement & EMS, Road and Bridge

- Flexibility
- Posture and lifting positions
- Bending over
- Core Strength
- Physical confrontation
- Muscles trained for sudden intense loads
- Pursuit
REDUCTION IN THE INCIDENCE OF TYPE 2 DIABETES WITH LIFESTYLE INTERVENTION OR METFORMIN (DIABETES PREVENTION PROGRAM RESEARCH GROUP)

58% reduction in Lifestyle Group (P<0.001 for each comparison)

N Engl J Med 2002; 346:393-403

↑ Focus
↑ Clarity

↓ Pain
↓ Weight

↑ Mood
↑ Resilience

↑ Agility
↑ Balance
↓ Rxn. Time

↑ Strength
↓ Injury

↓ Physical Health Risks

Absenteeism
Workers Comp
Law Enforcement

Auto
Liability
Medical Claims

Saved $$$
“What fits your busy schedule better, exercising one hour a day or being dead 24 hours a day?”

FITNESS PRINCIPLES
Fitness Principles

1. Any movement is better than no movement
2. To get benefits and results, you must challenge yourself regularly (progressive overload)
3. Variety is helpful (different stimuli)
4. Strength and Aerobic are two sides of the same coin, equally important

Fitness Principles

5. Fitness chunked up into bite size pieces is just as valuable as continuous
6. Longer is not necessarily better for health or weight loss
7. “You cannot outrun your mouth”
Re-think Fitness

“Instead of focusing on calorie burning, what if we looked at fitness as a way to supercharge our metabolism and reverse the hormone spiral of obesity, metabolic syndrome and diabetes!”

STRATEGIES TO OVERCOME COMMON HURDLES
### Common Hurdles & Solutions

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### Top 5 Strategies for Consistent Activity

1. Plan & Schedule;
2. Meet a Partner;
3. Spare Gym Bag & Shoes,
4. Get Enough Sleep/Rest;
5. Involve Your Kids.
WHAT SHOULD I DO? FITNESS SPECIFICS

Activity Types

1. **20 Minutes per Day** can be sufficient if done optimally
2. **Anaerobic** – strength, weights, resistance training
3. **Aerobic** – continuous, longer durations
   a. High intensity intervals - many boot camps use this principle
### Literature Summary

**Of Strength Training vs. Aerobic**

*(by strength of the available evidence)*

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<td>Blood pressure</td>
<td>↓ ↓</td>
<td>⇔ ↑</td>
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<tr>
<td>HDL cholesterol</td>
<td>↑ ↑</td>
<td>⇔ ↑</td>
</tr>
<tr>
<td>Insulin sensitivity</td>
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<tr>
<td>Percent body fat</td>
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<tr>
<td>Bone density</td>
<td>↑</td>
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<td>Muscle strength</td>
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<td>↑ ↑ ↑</td>
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<td>Physical function</td>
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<td>VO2 max</td>
<td>↑ ↑ ↑</td>
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The Presidents Council on Physical Fitness and Sports Research Digest, Series 2, no. 8, Dec, 1996

### Considerations For Strength Training and Metabolism

- How many calories does 1 pound of body fat burn in 24 hrs. at rest?
- How many calories does 1 pound of muscle burn in 24 hrs. at rest?
Ways to Strength Train

• Strength Training builds muscle and boost metabolism through resistance;
  – Weights/Machines;
  – Body weight exercises;
  – Pilates, bungee bands;
  – Cross fit, PX90, similar;
  – Yoga; and
  – Kettle bells.

Ignite your Calorie Burning Furnace – Strength Training Guidelines

• Frequency
  – 2-3 x per week

• Intensity
  – 1 set of 90 seconds to failure;
    Slowly! (20-30 reps in 90 seconds);

• Duration
  – 20-30 minutes total;

*Always consult your Dr. before starting a new program
Strength Training Tips

- Start where you are
- Increase weight gradually over time Complete the repetitions slowly
- Rest between between workouts
- Expect some initial soreness, goes away after 3 weeks

Maximize Your Time & Effort:
Aerobic Fitness

**Long Slow Distance can be counter productive**;
- Time consuming & boring;
- No metabolic or hormonal changes;
- Increases appetite;

**High Intensity Aerobic Intervals**;
- Biggest fitness gains
- Changes metabolism and hormones
- Most fat loss
- **Less that 15 minutes/session** including warm-up!
HIIT Fitness

• High Intensity Intervals 2-3 days/week
• 8-12 x 30 sec – 1 min sprints with 20-30 seconds easy; any activity;
• Regular pace other days;

The Fun Principle

• If you’re not having fun, you won’t do it very often
  – Competitive or cooperative?
  – Group/team or individual?
  – Indoor or outdoor?
  – Lower or upper body?
CREATIVE OFFICE FITNESS

Creative Office Strategies

• Take an hourly strength break: 1 exercise, 90 seconds
• Split strength: Upper body 1 day, lower body next
• Power walk/stride to another office, to the car, wherever you go
• Go visit co-worker rather than picking up the phone
Creative Office Strategies

• Conduct a biggest loser contest
• Get a device under your desk:
  – Stepper
  – Bike pedals
  – Treadmill desk
• Ask court for a treadmill in courthouse or annex
• Host walking meetings

More Creative Strategies

• DVD’s routines like P90-x, Pilates, Jillian Michaels, Active Yoga, many others;
• Streaming fitness
• Amazing number of local Cross-Fit facilities;
• *Your Body is Your Barbell* by BJ Gaddour
• Local High School gyms open to public?
Do You Like to Move It?

(800)456-5974
www.county.org/healthycounty
www.county.org/healthbenefitservices
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• Duration
  – 20-30 minutes total;

*Always consult your Dr. before starting a new program

Aerobic High Intensity Training Guidelines

• High Intensity Intervals 2-3 days/week

• 8-12 x 30 sec – 1 min sprints with 20-30 seconds easy; any activity;

• Regular pace other days;
Home-Based, Body-Weight, Single Workout Strength Training Routine

Exercise #1 - Body Weight Goblet Squats: make sure feet are shoulder width apart and parallel, slowly sit down keeping weight on your heels rather than your toes. Make sure your knees do NOT extend forward over your toes.

Easier - (sitting wall squat – ease yourself into a position where your knees are close to 90 degrees and hold for as long as possible; work up the time you hold the position):

Harder - (use a piece of luggage, or computer bag or something else around the house to add weight to your goblet squat):
**Exercise #2 - Stationary Lunge with Cans or Luggage:** Standing with lags fairly far apart front to back, lower yourself until your knee almost touches the floor. Drop straight down without moving forward. Complete 90 seconds on 1 side, then put other leg in front and repeat a second 90 seconds. Push up from the hip, leg and butt of your front foot. You may use one hand for balance support but not to push up.

**Easier (Bodyweight only):**

**Harder (Bulgarian split lunge with cans or luggage; start with rear foot on bench or chair about knee height, holding weight in non-balancing hand):**
**Exercise #3 - Calf Raises** Find a step or curb, inside or outside. Start on your tip-toes, then drop your heels while keeping your knees straight until you feel a good stretch. Use both legs at the same time but use luggage or weight of some kind.

Easier (both legs at the same time with no weight):

Harder (one leg at a time for 90 seconds each leg; can add luggage or weight also):
Exercise #4 – Pelvic Raise on chair or bench: start with your shoulder blades on the edge of a chair and feet positioned so that your knees are at approximately 90 degrees, and your butt sagging down. Then contract your butt (gluteal) muscles pushing your pelvis upwards into the air to make a flat bridge. Lower slowly and repeat.

Easier (on floor with both legs):

Harder (using one leg at a time on floor; can be done one leg at a time on chair for an even greater level of difficulty):
Exercise #5 – Plank: Get in push-up position but position your elbows shoulder width apart and hands together on a comfortable surface. Raise your hips creating a straight line between shoulders, hips and ankles. Start with the level of difficulty you can hold for at least 30 seconds and work up from there. Once you can hold 90 seconds on the ball, just keep increasing your time, or ask a friend to put a small weight on your lower back.

Easier (on knees, creating straight line between shoulders, hips and knees):

Harder (on ball, creating line between shoulders, hips, knees and ankles):
Exercise #6 – Crunches: Lying down with your knees bent and your arms across your chest, lift your shoulder blades up off the ground and hold for a fraction of a second. Keep you chin up and look at the ceiling directly above you through the full range of motion. Do NOT hold your head in your hands and yank on your head when you curl up.

Easier:

None

Harder (on ball: position ball under your mid back; curl up and lift shoulder blades off of ball while continuing to look at the ceiling):
Exercise #7 – Bent Leg Dead Lift with Soup Cans: Standing in ready position with knees just a touch bent and feet shoulder width apart, slowing lean forward from the waist until you feel a comfortable stretch in your lower back but not a strain. Slowly stand upright again, contracting your butt first, then your lower back. Sort of roll your back up to upright, but do NOT arch your back as you come up. Your knees will naturally bend as you lean forward, but do not make your legs the source of power for this exercise.

Easier (no cans or luggage):

Harder (using luggage or computer bag):
Exercise #8: Modified Knee Push-Ups: place your hands shoulder width apart, create a straight line between shoulders, hips and knees. Lower gently until chest just touches ground or shoulder gets tight. Then slowly push upwards to original position.

Easier (Wall push-ups, the easier you need, the closer to the wall you stand, the harder you need the further from the wall you stand):

Harder (regular pushups or hands or feet on chair or bench):
Exercise #9 – Inverted Rows or Bent over flies: Use a pulling strap with handles (about $20 in the fitness section at Walmart) that fits in a door jam. Standing close enough to the door so that you’re leaning away from it with your arms extended, pull yourself up to the handles, with your thumbs up, then let yourself back down to straight arms, keeping your body like a board.

Easier (stand more vertical to start):

Harder (stand even closer with more body lean, or do bent over flies using dumbbells as shown, but using soup cans or other weights available at home; bend your knees a bit as you do this):
**Exercise #10 - Shoulder Press with Cans or Luggage:** Sitting on chair or bench with feet firmly planted on floor and spine straight, start with your makeshift weights at chin level and elbows lowered, angled about 30 degrees in front of you. Push upwards while squeezing elbows behind you, keeping weights directly over elbows until fully extended. Lower elbows slowly and bring them slightly forward while returning to start position.

Easier (for some people with bursitis or shoulder impingement, shoulder flies may be easier than the overhead motion of the shoulder press):

Harder (use gallon milk jugs, luggage or other heavier weights)
Optional Exercise #11 – Seated Bicep Curls with Cans or Hand Weights: Seated firmly, with feet shoulder width apart for stability. Alternate arms with one coming up while the other is going down, until you can’t do that anymore; then the alternate one arm at a time. Focus on contracting your biceps while bringing the weight up. Keep your elbows tucked in to your sides, do NOT bring them forward as your hands come up.

Optional Exercise #12 – Seated Triceps Extension with Can or Hand Weight: Grasp can between thumb and forefingers of both hands, as if making triangle; lower behind head to starting position; Extend upwards over head, keeping elbows stationary. Lower back down slowly until touch neck and triceps stretched.