Healthy Back—Healthy IU!
Week Six
Training Your Body for Life

Presented by: Mary Yoke, PhD, FACSM, MA, MM
School of Public Health, IUB
School of Health and Human Sciences, IUPUI
What Have We Covered?

- **Week One**: back pain statistics and causes, spinal anatomy
- **Week Two**: workplace ergonomics
- **Week Three**: the problem with everyday activities
- **Week Four**: core stability & mobility
- **Week Five**: back pain management, conservative exercises for prevention
This Week: The Big Picture—Training Your Whole Body for Life!

The Components of Fitness:
1. Cardiorespiratory
2. Muscle Conditioning
3. Flexibility
4. Neuromotor (balance & agility)
But first, let’s talk about the Principle of Progression

- For optimal results, progress \textit{gradually}, one step at a time, toward a healthier back and improved fitness.

Proper progression should look like this.

~ 1-3 weeks at each stage; let your body adapt.

Not like this.

Too much, too soon.

\textbf{Ouch!} This results in injury and drop-out.
Proper progression can also refer to the choice of exercises

We’ve covered exercises for core stability, ab work, back muscle work, and many stretches—almost all from the left side of the continuum.

Always start with exercises on the left side!

Yoke & Kennedy, 2004. Functional Exercise Progressions. Publisher: Healthy Learning
This week I will ___________________

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(10-30 min?)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muscle conditioning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(all major muscle groups, plus core stability exercises)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2-3x/wk?)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stretching</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(daily for 5-10 min?)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance and Coordination</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2-3x/wk?)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What is realistic for YOU?
Cardiorespiratory (Aerobic) Activity

• Cardio moves help to get blood and nutrients flowing to the spine, relieve stiffness, and improve your mood!

• Other benefits: increased energy, increased metabolism, better cognition, reduced risk of many diseases (heart disease, diabetes, many forms of cancer, etc.)
Cardiorespiratory (Aerobic) Activity

• Repetitive, multi-muscle moves for > 10 minutes, 3-5x/week
• Intensity: ~5-7 on a scale of 1-10 (medium to hard)
• Activities: walking, jogging, cycling, swimming, elliptical, group cardio fitness, Zumba
Muscle Conditioning

- Strong muscles are essential for well-being and independence; strong core muscles are necessary for a healthy back.

- Maintaining an optimal muscle mass increases your metabolism and keeps bones strong.

- Workout with weights, machines, elastic bands or tubing, household items (e.g. soup cans, water jugs, backpacks), or even your own body weight.
Muscle Conditioning

• Ideally, you want to reach the point of fatigue within 8-12 repetitions, then rest for 1-2 minutes, and repeat the set

• 48 hours between intense workouts—muscles need time to repair and recover

• Upper body exercise ideas for home workout:

  - Triceps
  - Biceps
  - Upper back, rear shoulders
  - Chest, triceps
Muscle Conditioning

• Lower body exercise ideas for home workout
Muscle Conditioning: Remember the Core Stability Exercises from Week Four?
Flexibility

- Low back & glutes
- Inner thighs
- Calf muscles
- Hip flexors
- Chest, front of shoulder
- Hamstrings
Neuromotor Fitness (Balance, Agility, Coordination)
To Protect Your Back, Beware These Exercises!

- Double leg raises/flutter kicks/scissors
- Windmills
- Full sit-up
- Bilateral row with poor form
- Dead lift with poor form
Hip Flexor (AKA iliopsoas) Info:

- Tight hip flexors are common due to too much sitting! Almost everyone needs to stretch the hip flexors…
Which exercise is best?

- The one you will do!!
- The one you enjoy and is healthy and pleasurable
- Be aware that over-exercise (over-training) is stressful and potentially dangerous
The Knowledge / Behavior Gap
Sticking with Exercise

• It must be enjoyable!

• It must be convenient

• It’s optimal to have social support
Can You Name the Immediate (Today) Benefits of Physical Activity?

- Better sleep
- Improved brain functioning
- Decreased stress, anxiety, and depression
- Decreased chronic muscle tension; feel better
- Increased energy and productivity
- Improved mood
- Improved self-confidence and self-esteem
- Better digestion
- Better posture
This week I will

Be realistic!

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardio (10-30 min?)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muscle conditioning (all major muscle groups, plus core stability exercises (2-3x/wk?))</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stretching (daily for 5-10 min?)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance and Coordination (2-3x/wk?)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Bottom Line: Increase Physical Activity!
Sit Less; Move More!
Make a Plan!

This week I will __________________________

Examples:

1) This week, I will walk everyday for 15 minutes.

2) This week, especially when I’m sitting, I will continue to be mindful and catch myself whenever I start to slouch. I will then stand up and practice good neck, back, and shoulder blade alignment against the wall. To help me remember, I will set a timer for every 10-15 minutes on M/W/F.

3) This week, I will do 15 minutes of muscle conditioning exercises on Tuesday and Friday, and I will stretch every day for 5 minutes as soon as I wake up in the morning.
• Stay mindful and self-aware.
• You can retrain your body to do the right thing and reduce your risk of back pain!
• You can experience more joy in your life by becoming more active and taking good care of yourself!

Good Luck!
This Presentation Was Brought to You By:

MOVE MORE...SIT LESS...FEEL GREAT!