

## Inactivity physiology – too much sitting time?

FIT TO PRACTICE

We have known for years that the benefits of regular physical activity to help prevent major health diseases are clear and unanimous. Rarely do you visit your doctor and leave without them saying: “You ought to exercise more and eat better; that will help you maintain and/or improve your overall health.” Current public health guidelines are promoting at least 150 minutes per week of moderate- to vigorous-intensity physical activity in order to be healthy. As of 2012 Indiana ranks 41st in health indicators (obesity, smoking, diabetes, sedentary lifestyle combined) compared to our fellow states. We have some work to do! In order to improve our overall state statistics and help ourselves be healthier, we need to consider moving more at work and during our leisure time.

Recent studies have suggested that prolonged bouts of sitting time and lack of whole-body muscular movement are strongly associated with obesity, abnormal glucose metabolism, diabetes, metabolic syndrome, cardiovascular disease risk and cancer as well as total mortality *independent* of moderate- to vigorous-intensity physical activity. This may come as a surprise to many exercisers that either run

in the morning before work or take a noon walk. A possible new paradigm of inactivity physiology has been proven by many researchers. This new way of thinking emphasizes the distinction between not exercising and the health consequences of sedentary behavior that is limiting everyday-life non-exercise activity. Until now, the expression “sedentary



Consider a walking meeting with (L-R) Julia L. Orzeske, executive director of the Indiana Commission for CLE; Terry L. Harrell, executive director of Indiana JLAP; and Supreme Court Justice Steven H. David.

behavior” has misleadingly been used as a synonym for not exercising. Sedentary time should be defined as muscular inactivity rather than the absence of exercise.

This new paradigm of inactivity physiology or sitting time is based on four issues:

1. Sitting and limiting non-exercise activity independently increase disease risk.
2. Sedentary behavior (not choosing to exercise) is another risk factor.
3. The molecular and physiological response in the body of too much sitting is not always the same as the response that follows a bout of additional physical activity.
4. If you are already insufficiently physically active you could increase your risk even further with prolonged sitting.

The solution to this dilemma for many is to look at your sitting time whether you exercise or not and try to reduce it. If you reduce

your sitting time you will be healthier overall – *this* is what the new “inactivity physiology” research is touting.

What kinds of things could you do to reduce sitting time?

1. Have a walking meeting versus a sit-down meeting.
2. Encourage standing at work versus sitting by looking into standing desks and/or stand at your next meeting occasionally.
3. Climb the stairs versus take the elevator.
4. Walk to a restroom that is farther from your office than just down the hall.
5. Perform 5-10 sit-to-stand movements at your desk per hour to reduce sitting time and increase blood flow in your lower body.
6. Walk to deliver a message within your office versus sending it via email.
7. Walk/pace while you are having a phone conversation in your office.



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Some have touted this lack of movement in our day (inactivity physiology) as a health risk that could be as great as smoking: <http://pittsburghquarterly.com/index.php/Personal-health/is-sitting-the-new-smoking.html>. If you Google [juststand.org](http://juststand.org), you will find even more information on how sitting time is not only detrimental to our health; but we also DON'T LIKE IT! So, why do we sit so much? Is it because the "norm" is to sit at work? Over the last 40 years we have replaced much of our daily movement with either technology and/or devices. Think about it – when was the last time you:

- opened your garage door by hand?
- raked your leaves using a real rake and not a blower?
- mowed your lawn using a mower that was not self-propelled?
- opened a can using a regular can opener?
- drove around a parking lot to find the closest space?
- shopped online versus going to the mall because it was easier?

These are just a few examples of ways we have replaced daily movement with activities that are less intense and require less muscle movement. It's no wonder we are discussing "inactivity physiology" as a health risk factor. Awareness is the first factor in tackling a health risk; look around and see what you can do to "move more, sit less and be well!" 🏡

## Annual Report shows nearly 1,000 cases considered by Supreme Court

The Supreme Court annual report (July 1, 2013 - June 30, 2014) is now available. The report provides information about the work of the Court and its affiliated agencies. Chief Justice Loretta H. Rush explained, "The annual report provides a substantial overview of Supreme Court cases, opinions and projects. Details are always available at [courts.in.gov](http://courts.in.gov), but this report allows readers a snapshot of the breadth of work for a one-year period." Read the report at [courts.in.gov/supreme/files/1314report.pdf](http://courts.in.gov/supreme/files/1314report.pdf).

During the fiscal year, the Court was asked to review 995 cases. The five justices –Loretta H. Rush, Brent E. Dickson, Robert D. Rucker, Steven H. David and Mark S. Massa – read thousands of pages of briefs to determine which cases to grant transfer (accept as a Supreme Court case). Other reported statistics include:

- 94 majority opinions handed down by the Court
- 81 percent of the opinions handed down were unanimous (5-0 or 4-0)
- 80 oral arguments were heard

Details on each of the Supreme Court agencies are also available in the report. Photographs taken throughout the year show the Court's interaction with students, community members and the press. Narratives in the report from various Supreme Court agencies showcase the following:

- The Odyssey case management system will soon be used by the Supreme Court.
- Case data from 1.6 million new trial court cases was collected.
- 102 hours of instruction were provided to judges statewide.
- 584 of 823 applicants passed the Indiana Bar Exam.
- A new version of the mediator registry launched (1,291 mediators online).
- 81 final orders were issued in attorney discipline cases.
- One case included formal discipline of a judge.
- Health issues that impact senior lawyers are a focus of assistance programs.
- Public outreach included 349 tweets.

Past annual reports can be found at [courts.in.gov/supreme/2484.htm](http://courts.in.gov/supreme/2484.htm). Later this year the *Indiana Judicial Service Report*, which details the work of the trial courts, will also be available on the Court's website. 🏡