No pain, no gain? No Way / Work out smarter, not harder, new research shows

[ALL EDITIONS]

Newsday - Long Island, N.Y.
Author: JOHN HANC. John Hanc is a regular contributor to Newsday.
Date: Mar 9, 2004
Start Page: B.48
Section: HEALTH
Text Word Count: 866

See sidebar: Tasks and chores

How hard is "too hard" in exercise? And when are you not working hard enough?

A new study shows that the answer to those questions may be a lot simpler than the old "no pain, no gain" adage.

"We know that people, especially those just becoming physically active after a long period of sedentary living, are not very good at estimating and regulating how hard they are exercising," says exercise physiologist Panteleimon Ekkekakis of Iowa State University, the lead author on the study, which was published in the February issue of the journal Preventive Medicine. "Consequently, many people do more or less than what is generally recommended."

If it's less - that is, if you're not working out hard enough - you're less likely to accrue health and fitness benefits associated with exercise (from weight reduction to improved heart and lung function to reduction of high blood pressure and lower risk of many diseases). If, on the other hand, the intensity is significantly higher, then it's going to hurt, and you'll be less likely to continue.

The ideal level seems to be at the transition or threshold between aerobic exercise - activity done while an adequate supply of oxygen is being delivered to the working muscles and which can be sustained for a longer period of time - and anaerobic, or harder, "short- burst" activity. Simply put, it's the difference between a comfortable jog (or walk) and a flat- out, gasping- for-breath sprint.

Finding that optimal intensity level, at or below the aerobic- anaerobic transition, is not easy for most. The tools often seem inadequate: Measuring one's heart rate, Ekkekakis notes, is often inconvenient, and judging one's perceived exertion rate on a numerical scale is unreliable. Ekkekakis and his colleagues wanted to see if they could find a way to help people understand what optimal intensity "feels" like so they could adjust their exercise efforts accordingly.

They had two groups each of 30 college students report their feelings while running on treadmills - at various levels of effort - and got a pleasant surprise. "As astonishingly simple as it sounds," Ekkekakis says, "the most appropriate level of exercise intensity is the intensity that does not feel unpleasant."

These findings were confirmed with middle-age female subjects who had just started to exercise after long periods of inactivity. When asked to choose their preferred intensity level, Ekkekakis says, "they intuitively selected exactly the level that corresponded to their level of aerobic-anaerobic transition."

The implication: If your exercise feels pleasurable, you're probably at the right intensity level. If it feels unpleasant, you're exercising too hard.

There are caveats, principally that "pleasure" is relative. There are those who would say their workout is causing them "displeasure" while they're getting changed in the locker room. "It's critical, especially for beginners, to find not only an activity they like, but an environment they like doing it in," says sport psychologist Michael Sachs of Temple University in Philadelphia.

Also, Sachs points out, while what might be called the "pleasure principle" of exercise intensity is valid to beginners, there are times when anaerobic training is necessary - for athletes in sports like football or basketball,
for example. Also, most forms of resistance (weight) training are short-duration, anaerobic work.

Others worry that by associating the word "pleasure" with exercise, a hard truth is being sugar-coated: "Exercise requires some effort," says exercise physiologist John Buzzerio, vice president of Manhattan's Plus One Fitness. "There's a reason why we call it a workout."

Still, as this study suggests, when it comes to exercise, what feels good for us and what is good may be closely related. So while this may dispel the old exercise cliche of no pain, no gain, the research gives new meaning to another: Listen to your body. If it's saying "I like this," you're on the right path to fitness.

Charting Intensity

Here is how exercise intensity is measured:

Heart rate: Measured by a heart monitor or by taking your pulse while exercising; the recommended training intensity or "zone" is about 60 percent to 80 percent of your maximum heart rate per minute, which can be (roughly) calculated by subtracting your age from 220.

Rate of perceived exertion (RPE): A subjective, numerical gauge developed by Swedish psychologist Gunnar Borg, this scale runs from 6 (effortless) to 20 (extremely hard). Ideal training RPE for most people is about 12-14.

Talk test: The idea is that if you can breathe normally enough to carry on a conversation but not carry a tune - in other words, if you can talk while exercising but can't muster the breath to sing - you're at the right intensity.

The pleasure principle: Based on a new study that found most people can intuitively gauge their ideal intensity simply on whether it's pleasurable. If you feel crummy, you're probably going too hard. - John Hanc

Abstract (Document Summary)

Finding that optimal intensity level, at or below the aerobic-anaerobic transition, is not easy for most. The tools often seem inadequate: Measuring one's heart rate, Ekkekakis notes, is often inconvenient, and judging one's perceived exertion rate on a numerical scale is unreliable. Ekkekakis and his colleagues wanted to see if they could find a way to help people understand what optimal intensity "feels" like so they could adjust their exercise efforts accordingly.

They had two groups each of 30 college students report their feelings while running on treadmills - at various levels of effort - and got a pleasant surprise. "As astonishingly simple as it sounds," Ekkekakis says, "the most appropriate level of exercise intensity is the intensity that does not feel unpleasant."

These findings were confirmed with middle-age female subjects who had just started to exercise after long periods of inactivity. When asked to choose their preferred intensity level, Ekkekakis says, "they intuitively selected exactly the level that corresponded to their level of aerobic-anaerobic transition."

Reproduced with permission of the copyright owner. Further reproduction or distribution is prohibited without permission.