|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  | | --- | --- | --- | | |  | | --- | | American Society of Exercise Physiologists | | | | |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  | | --- | | **In This Issue** | | [**Editor's Corner**](https://mail.google.com/mail/?ui=2&view=bsp&ver=ohhl4rw8mbn4#12df61f7528e11a2_LETTER.BLOCK7) | | [**Ask the EP**](https://mail.google.com/mail/?ui=2&view=bsp&ver=ohhl4rw8mbn4#12df61f7528e11a2_LETTER.BLOCK8) | | [**Ads & Employment**](https://mail.google.com/mail/?ui=2&view=bsp&ver=ohhl4rw8mbn4#12df61f7528e11a2_LETTER.BLOCK9) |  |  | | --- | | **Quick Links** | | [**Journal of Exercise Physiology-online**](http://r20.rs6.net/tn.jsp?llr=rfwe9acab&et=1104409459387&s=2&e=001kRsFBuuCD4PxI-8XNt0suX9gjRJAd1syVLdZFeQHQzjXQihlhMvu9sDoPxK5BUzkTuexvi9AEPNjVY4dRiJ64mM3g5Yp4HckZEs3BKcL3oZsEFIqCzZJwOzKlloqeotJ)    [**Professionalization of Exercise Physiology-online**](http://r20.rs6.net/tn.jsp?llr=rfwe9acab&et=1104409459387&s=2&e=001kRsFBuuCD4O9MlPnPTv9PsupjwqfZZP0Dczh__vIxMftGPu1HnHV3Ibx98BWNHjWhAcAbEjT9_TUVvKPYriHYL4Z1GNzWK9SMTwe-ujnOtvynO4EeFefDHy9txvRmlsD)    [**More On Us**](http://r20.rs6.net/tn.jsp?llr=rfwe9acab&et=1104409459387&s=2&e=001kRsFBuuCD4NRRWmO8rTDgS8Az2rjAywqG7zhgyQU_UTqUE9lyptYdZc-Ls8Dqhpied-RcYXUMz_Wdmlu5YUs2JsOnanMzlXQCkVBmwYhvy0=)    [**PhDs can now petition for Board Certification**](http://r20.rs6.net/tn.jsp?llr=rfwe9acab&et=1104409459387&s=2&e=001kRsFBuuCD4OP584m3DrYf9lsUui7ycJiCKanPSN-oCRpjZwKvgWs2KbFGomvu-atGLKwQlejmpX0ZJknrEQ8EPV2RlQpLbKOcN_n5vXOKy7VfxklUsKYYImb0LsYizME7fvflB_-PJM-3zewovTuMA==) |  |  | | --- | | **Join Our List** | | [Join Our Mailing List](http://visitor.constantcontact.com/email.jsp?m=1101686528177) | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | **Issue: #2** | **February 2011** |  |  |  | | --- | | **Dear Tommy,**  Thank you for being part of our community. **ASEP is the specific voice for (historically under-represented) Exercise Physiologists.** Please use this Newsletter as a link to ASEP resources from scientific journals to professional papers, to employment and related opportunities. And be sure to click on "More On Us" at the left for the ASEP-Newsletter's parent web site.  Yours in health,  -Lonnie Lowery and Jonathan Mike, ASEP-Newsletter Editors |      |  |  | | --- | --- | | **Editor's Corner** |  | | editorial  **"How" versus "Why" in Exercise Physiology**    In a recent faculty conversation I was reminded of two different and sometimes opposing philosophies in Exercise Physiology (EP). On one hand, there were the cardiac rehab Masters-prepared faculty persons, who feel that if it's not a skill the graduates will one day use on the job, it's not worth emphasizing. One the other hand, there were faculty persons (me among them) who felt that class activities like lab reports are valuable whether or not the graduated student will one day do them in the clinical setting. It dawned on me that on some level the difference in teaching philosophy was a "how" versus "why" argument.    Many practitioners and clinicians feel that the practical EP skill set is nearly all-important. How an EP undertakes an assessment or test with a patient not only makes him / her competent, it makes him a technician (in the highest sense) that earns the respect of licensed healthcare providers. Many highly-educated PhDs, conversely, feel that giving students a mechanistic understanding of the underpinnings of their field is paramount for respect. This not only makes them better clinicians, it builds a problem solving ability and depth of knowledge that serves them in graduate work and research as well.    Many ASEP-Newsletter readers are probably familiar with this potential dichotomy in EP training and practice. The best thing about EP in academia is that it embraces both philosophies. Our graduates get a unique combination of lab experiences "and" rigorous anatomy, physiology and biochemistry theory that make them extremely high quality. They outshine not only questionably-certified personal trainers but also graduates of "tech-ed" programs and even some other bachelors-educated health grads.So whether you're a "how" or "why" EP, remember to embrace your colleagues across the clinical-vs-research isle.    Together we create a profession that America badly needs on so many levels.  Lonnie Lowery, PhD  Co-editor, ASEP-Newsletter | | |  |  |      |  |  | | --- | --- | | **Ask the EP** |  | | **Q: This month, we change pace, offering a personal essay from our "Ask the EP" column author...**  **Muscle Confusion equals Mass Confusion**     You hear a lot about the concept of 'Muscle Confusion" concerning many fitness programs and routines.  What is the real truth you might ask? Well...    It seems like confusion is the "state of mind' of most gyms today and seems to be common practice in the fitness industry. I know you have seen it everywhere, as have I. One of the biggest problems I have is that so much of this industry is based around people, or companies selling things, and putting results into an illusion of mass confusion. Whatever happened to consumer advocacy and education?    I know the readers here are smart and bring energy and information from a variety of mind, body, strength, and clinical capacities. Many of you will get this question from the so called "experts" so I thought I would try and set the record straight.   Terms like "muscle confusion" are common and many will tell you that these are sound exercise principles. In fact, they are useless techniques that are the opposite of progress and are often gimmicks promoted by greedy entrepreneurs.  These training methods can even be used to hide the fact that paying clients, or even athletes for that matter, are making zero improvements following the routine.    In reality, most of the new fads like CrossFit, P90X, Insanity, etc. are simply glorified and well marketed versions of circuit training.  The muscle confusion theory leads to a paradox: training that leads to no significant muscular adaption. The body can only adapt sufficiently to chronic stressors, which are stressors that are applied with enough intensity and regularity to cause a change in the physiology necessary to the adaptation.  If you frequently change the nature of these stressors, your physiology can only adapt to those aspects which are consistent between workouts. The cardiovascular (CV) system may respond and adapt to every circuit training session you conduct, but if the exercises are not consistent, no adaptation. If, for example, you choose a different lower body exercise for each session, your body will only accommodate strength into those parameters which are consistent from workout to workout. To the untrained eye a variety of exercises may seem like a good idea, but in reality it limits strength because the body's inherent motor learning capacity is reduced. The bottom line is this: training the same exercises regularly allows the body to adapt and thus grow stronger, while training a large variety of exercises equates to doing the same workouts with little to no adaptation. I'm not saying don't change exercises or methods or training. I'm saying simply to understand the nature of adaptation.  So essentially, this muscle confusion is a total myth.    **Key Principles**  People need to focus on progressive OVERLOAD. That does NOT mean every day, or every training session has to be a max attempt with horrible form and technique. Focus on 3 main components of overload:  1) Intensity (load, weight, % of 1 rep max, or relative intensity  2) Volume (weight x sets x reps)  3) Density (vol / time)  Try to establish a PR (personal record) every training session in one of those at minimum. Your body will respond. No need to confuse it!  Jonathan Mike, MS, CSCS, USAW, NSCA-CPT  Doctorate Student  Co-editor, ASEP Newsletter | |      |  |  | | --- | --- | | **Advertisements & Announcements** |  | | **----------------------------------------------------  NOTE:** [**ASEP Board of Directors with approval of The Center for Exercise Physiology-online**](http://r20.rs6.net/tn.jsp?llr=rfwe9acab&et=1104409459387&s=2&e=001kRsFBuuCD4OP584m3DrYf9lsUui7ycJiCKanPSN-oCRpjZwKvgWs2KbFGomvu-atGLKwQlejmpX0ZJknrEQ8EPV2RlQpLbKOcN_n5vXOKy7VfxklUsKYYImb0LsYizME7fvflB_-PJM-3zewovTuMA==) **developed the "EPC Petition Guidelines" for doctorate exercise physiologists to become Board Certified.** | | |  |  | | | |  | | --- | |  |  |  | | --- | | Thank you for perusing our opinions, facts and opportunities in this edition of the ASEP-Newsletter.  **Sincerely,**  Lonnie Lowery American Society of Exercise Physiologists | | | |
| |  |  | | --- | --- | |  | All contents are copyright 1997-2007 American Society of Exercise Physiologists. | |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | [http://img.constantcontact.com/letters/images/SafeUnsubscribe_Footer_Logo_New.png](http://visitor.constantcontact.com/do?p=un&m=001jUzpE4Imd5RYeVV1fW-1mw%3D%3D&se=001nf8pHkl5hhs%3D&t=001ZsPNu8YFRaGkt_2xnExiYA%3D%3D&reason=001IqezpQbqEsU%3D&llr=rfwe9acab) | [http://img.constantcontact.com/letters/images/CC_Footer_Logo_New.png](http://www.constantcontact.com/index.jsp?cc=TEM_News_200) |   This email was sent to tboone2@css.edu by [lonman7@hotmail.com](mailto:lonman7@hotmail.com) |  [Update Profile/Email Address](http://visitor.constantcontact.com/do?p=oo&m=001jUzpE4Imd5RYeVV1fW-1mw%3D%3D&se=001nf8pHkl5hhs%3D&t=001ZsPNu8YFRaGkt_2xnExiYA%3D%3D&reason=001IqezpQbqEsU%3D&llr=rfwe9acab) | Instant removal with [SafeUnsubscribe](http://visitor.constantcontact.com/do?p=un&m=001jUzpE4Imd5RYeVV1fW-1mw%3D%3D&se=001nf8pHkl5hhs%3D&t=001ZsPNu8YFRaGkt_2xnExiYA%3D%3D&reason=001IqezpQbqEsU%3D&llr=rfwe9acab)™ | [Privacy Policy](http://ui.constantcontact.com/roving/CCPrivacyPolicy.jsp). |   American Society of Exercise Physiologists | Dept. of Exercise Physiology | College of St. Scholastica | 1200 Kenwood Avenue | Duluth | MN | 55811 |

http://r20.rs6.net/on.jsp?llr=rfwe9acab&t=1104409459387.0.1101686528177.2&ts=S0583&o=http://ui.constantcontact.com/images/p1x1.gif

Reply

American Society of Exercise Physiologists | Dept. of Exercise Physiology | College of St. Scholastica | 1200 Kenwood Avenue | Duluth | MN | 55811