|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  | | --- | --- | --- | | |  | | --- | |  | | | | |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  | | --- | | **In This Issue** | | [**Editor's Corner**](https://gweb1.css.edu/gw/webacc/ba3dc617eeea5cb5a4a68e22fa1714b68157b4/GWAP/HREF/?action=Attachment.View&Item.Attachment.id=1&User.context=ba3dc617eeea5cb5a4a68e22fa1714b68157b4&Item.drn=233647z15z0&Item.displayExternalImages=0#LETTER.BLOCK7) | | [**Ask the EP**](https://gweb1.css.edu/gw/webacc/ba3dc617eeea5cb5a4a68e22fa1714b68157b4/GWAP/HREF/?action=Attachment.View&Item.Attachment.id=1&User.context=ba3dc617eeea5cb5a4a68e22fa1714b68157b4&Item.drn=233647z15z0&Item.displayExternalImages=0#LETTER.BLOCK8) | | [**Ads & Employment**](https://gweb1.css.edu/gw/webacc/ba3dc617eeea5cb5a4a68e22fa1714b68157b4/GWAP/HREF/?action=Attachment.View&Item.Attachment.id=1&User.context=ba3dc617eeea5cb5a4a68e22fa1714b68157b4&Item.drn=233647z15z0&Item.displayExternalImages=0#LETTER.BLOCK9) |  |  | | --- | | **Quick Links** | | [**Journal of Exercise Physiology-online**](http://rs6.net/tn.jsp?et=1102685897469&s=2&e=001M-n1QE7vYuAT8ltPGznxpHY2CwcZSTlnlM_i0_ybG7BF-2X8fdy2W-c4-VZAmkc-xELbXbFjI5u7R6DRcSvCsI9MwPUVGmK87qbi84rm0sIWvbAKivK3LE-mLycEL4iu)    [**Professionalization of Exercise Physiology-online**](http://rs6.net/tn.jsp?et=1102685897469&s=2&e=001M-n1QE7vYuCEeVOoIUIU8nsN7CXBXEEQpB0DvXKdnnQ4CakAEkBe5MuQ6sXmPb7z1DnDgBW0wWXH6CrQxowi48CEuxUpUUev33ngb20Fs-QOVSE0EkW7VPT5rMw_sFyt)    [**More On Us**](http://rs6.net/tn.jsp?et=1102685897469&s=2&e=001M-n1QE7vYuAXMhPSxAqUuXre4TS_zGAaL6oNVAhPLDDzCoxyt4ICHUf32sP0jGK-gHVbDlTZ9AomXYohvRQQ8fnaT6aNoSuciYpkdpCeZUA=)    [**PhDs can now petition for Board Certification**](http://rs6.net/tn.jsp?et=1102685897469&s=2&e=001M-n1QE7vYuD-UojU-OmqlQr7QA1FTo2QWNoCfC6Vit_YyrPK3smH6MyoeFxyTB7Gn7ErbJ8b9wCjAgBzEYBhfPvKrholhXJ11jrkUHdqwHz4Svg-ER-8IVwuCspACFynbRLUCyA5T_v3STGgcZS5ew==) |  |  | | --- | | **Join Our List** | |  | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | **ASEPNewsletter** | **September 2009** |  |  |  | | --- | | **Dear Exercise Physiologists,**  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 recent web site.  Also, members please consider the [**ASEP Annual 2009 DUES Renewal Notice**](http://rs6.net/tn.jsp?et=1102685897469&s=2&e=001M-n1QE7vYuCyG6E2nwcPIt1Ch1WdEJ-P-kQ-5QpGWxn8D0FGtg6HbhCGA_pSUSnDKg6PH0dChJOlc7P8ni9m5fO-sYDz8RRpQbtg6lKBJhaL56xsfO3sy2JsrQfvCyL6ASQTMl-ao_aOgSohJbc0BESxMvl-qtqi) on the ASEP web site.    -Lonnie Lowery and Jonathan Mike, ASEP-Newsletter Editors |      |  |  | | --- | --- | | **dd** |  | | **Subscriber Update and Invitation, Fall 2009**  Universities everywhere are starting their Fall semester this month, making for a busy, busy time for all involved. The ASEP-Newsletter editors and ASEP Board of Directors are no exeption. Thus, this month we are simply updating readers on the growth of the ASEP-Newsletter. According to our email service provider, we **now have 1570 subscribers, including professionals from universities, noted diabetes centers, other medical centers and other professional organizations**. No one has unsubscribed for months, as is common to most online newsletters, so thanks to everyone who keeps on interested eye on ASEP and the ASEP-Newsletter. You are a relatively small but extremely high-quality group of readers. Thus, **the ASEP-Newsletter is now accepting reader-submitted editorial commentary for consideration**.  More micro-reviews, editorials and professional statements are on the way in future months.  Dr. Lonnie Lowery, ASEP-Newsletter Editor | |      |  |  | | --- | --- | | **Ask the EP** |  | | This month we offer another personal essay from our "Ask the EP" column author... **Pro or Con? - Should Children serve as Research Subjects?**  The **Declaration of Helsinki** [1] has traditionally limited research involving children by demanding special justification for inclusion of research that deals with health matters. They argue that future considerations require special grounds for excluding children from research. Due to the considerable variation in the rate of growth and development of children, research from adult populations may be invalid and unlikely to transfer. In addition, the Declaration also states that children's attitude and research point of view should hold equal importance to that of adults. Yet, it is clear that using children in research studies requires special attention and need, not only for potential risks involved but also the legitimacy of the research. Ethical issues and boundaries can arise, including such as vulnerability, age, and informed consent.  The main problem that usually accompanies research with children is the argument that they have **impaired autonomy** and require consent of their parents, legal representation, or guidance with the decision-making process; all of these considerations bear directly on whether permission is granted to participate as a research subject. **Interestingly, the research that has been done indicates that between ages of 7 and 12, children do have the ability to decide whether they should participation in research or not** [2-4]. Kannuken [5] explains the need for greater attention that is required by researchers to ensure children are fully informed of and understand the details of the research.  These research points beg the question: what is the justification for the inclusion of children in research?  Certainly, it is a good question that needs to be dealt with accordingly in order to extrapolate meaningful outcomes. First, certain diseases are considered childhood diseases or heredity-induced. Therefore, it is reasonable to require extensive research to be performed on children. Considering that the medical community continues intense scientific study on both biological and physiological causes of worldwide epidemics, such as obesity, then such research should include children to explore all avenues and causes.  Second, there are well known problems in extrapolating pharmacological data from adults to children, due to growth and developmental differences [6]. Specifically, the effects of certain drugs may pose either dangerous or diminished outcomes. Because of age-related metabolic differences, serious consequences may occur.  Hence, it is expected that drugs used in treatment of children must be tested before use, and within all populations, including children, during or within clinical trials. Third, as companies seek treatments for childhood diseases such as Autism and Attention Deficit Disorder, research must be performed to determine what normal development is compared to what is abnormal. To do so, subsequent policies and practice guidelines to guide treatments must be properly carried out [7].  If the research community agrees upon the inclusion of children in research (i.e., experimental and/or clinical trials), it is critical to **assess the degree of benefit against any risk of harm** or any pain that might result from the investigation. Within all research settings, issues of vulnerability can aggravate and potentially worsen the quality of the research. For example, take the prevalence and ongoing research on obesity.  Children may feel pressured from parental involvement to participate in an experimental or clinical design to measure up with current social standards, such as a healthier lifestyle and having increased self-esteem. This type of thinking is necessary to ensure that the protocols carried out in exercise physiology laboratories are ethical and professional.  The Royal College of Pediatrics and Child Health guidelines [7] indicate the following clause:  "We believe that research in which children are submitted to more than minimal risk with only slight, uncertain or no benefit to themselves, deserves serious ethical consideration."  According to the guidelines, low risk includes procedures that cause brief pain or tenderness, and small bruises or scars. High risk includes 'lung or liver biopsy" which are not justified for research purposes alone [7]. Conversely, though, researchers might argue that the participation of children in such studies might actually be a positive life experience.  There are many physiological assessments and procedures used in exercise physiology that exhibit pain or discomfort. Assessing blood lactate measurements either from a finger prick or the anticubital space is an example of mild pain or discomfort, especially in children. Previous investigations report these techniques have been conducted in exercise physiology during non-theaputic research in adolescence [8-10]. First, the question remains whether or not this is ethically justifiable, even though it has been accepted by research and laboratory procedures. Second, how is it in the child's best interests to be a research subject under such conditions? Third, what if a child has an untreatable disease or condition? Does this permit the child to serve as a subject, as a means for pure benefit of future generations?  In this regard, however, Sheppard [11] points out that care should be taken not to exploit the vulnerable in research. He later states:  "If the research can be conducted on a less vulnerable group, then it should be."  **It is difficult to know the "right" answer as it pertains to children.** Both sides are justified, while the decision still seems to be situation-dependent. Meaning this: What is the experimental design? What are the risks? What are the benefits? With regards to the RCPCH guidelines,  children are themselves permitted to determine whether an intervention presents a low or minimal risk. However, it can only apply when children are capable of making that determination. In contrast, even older children may not be capable of making the right decision until after the experimental research. Notwithstanding, although the research may not induce benefits, it is not necessarily unethical or illegal. The fact is, research must be done in certain scientific areas in order to treat or cure certain diseases or conditions. Opinions are welcome.  References   1. 1. World Medical Association. Declaration of Helsinki. (2000). Ethical principles for medical research involving human subjects. Geneva: WMA. 2. Broome ME. (1999). Consent for research with pediatric patients. Seminar in Oncology Nursing. 15(2):96-103. 3. Shevell MI. (2002). Ethics of clinical research in children.  Seminar in Pediatric Neurology. 9(1):46-52. 4. Broome ME, Stieglitz KA. (1992) The consent process and children. Research in Nurse Health. 15(2):147-52. 5. Kankkunen P. (2002).Ethical issues in pediatric nontherapeutic pain research.Nursing Ethics. 9(1):80-91. Review. 6. American College of Sports Medicine (2006). Exercise Testing for Children and Elderly People', in Guidelines for Exercise Testing and Presrciption, 7th ed. London: Lippincott, Williams, and Wilkins. Pp. 237-51. 7. Royal College of Pediatrics and Child Health. (2000). Guidelines for the Ethical Conduct of Medical Research  Involving Children. Archives of Disease in Childhood. 82: 177-82. 8. Martinez LR, Haymes EM. (1992). Substrate utilization during treadmill running in prepubertal girls and women. Medicine in Science Sports Exercise. 24(9):975-83. 9. Alten J, Mariscalco MM. (2005).Critical appraisal of Perez et al: Jugular venous oxygen saturation or arteriovenous difference of lactate content and outcome in children with severe traumatic brain injury. Pediatrics and Critical Care Medicine. 6(4):480-2. 10. Tsalis G, Nikolaidis MG, Mougios V. (2004). Effects of iron intake through food or supplement on iron status and performance of healthy adolescent swimmers during a training season. International  Journal of Sports Medicine. 25(4):306-13. 11. Shephard RJ. (2002). Ethics in exercise science research. Sports Medicine. 32(3):169-83. Review.   Jonathan Mike, CSCS, USAW, NSCA-CPT,  Doctoral Student, Assistant Editor | |      |  |  | | --- | --- | | **Advertisements** |  | | **Opportunities Related to Exercise Physiology**  **The Department of Kinesiology at the University of New Hampshire**... is currently seeking applicants for a tenure track appointment in Exercise Science at the Assistant or Associate Professor level. ...[**more information...**](http://rs6.net/tn.jsp?et=1102685897469&s=2&e=001M-n1QE7vYuDO31aIH_GY43Q8PccgyJ7RhvplN7ucLOw6IQFgZZqgyHKwct3YEqjdcDwKQvf6Jyg4Mk7HdSz0TQFcJEv6sMeIhGt0bfi3tm8P6MIgGnUmLA==)  **----------------------------------------------------**  **NOTE:** [**ASEP Board of Directors with approval of The Center for Exercise Physiology-online**](http://rs6.net/tn.jsp?et=1102685897469&s=2&e=001M-n1QE7vYuD-UojU-OmqlQr7QA1FTo2QWNoCfC6Vit_YyrPK3smH6MyoeFxyTB7Gn7ErbJ8b9wCjAgBzEYBhfPvKrholhXJ11jrkUHdqwHz4Svg-ER-8IVwuCspACFynbRLUCyA5T_v3STGgcZS5ew==) **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. | |  | | |

|  |  |  |
| --- | --- | --- |
| [**Forward email**](http://ui.constantcontact.com/sa/fwtf.jsp?m=1101686528177&ea=tboone2%40css.edu&a=1102685897469)   |  |  | | --- | --- | | This email was sent to tboone2@css.edu by [lonman7@hotmail.com](mailto:lonman7@hotmail.com).  [Update Profile/Email Address](http://visitor.constantcontact.com/d.jsp?v=001_E1ee4Kj9gCH_BKWU7wgMlCiP74iJvBklhqOHCV1cGKbiYMB07hgZ6v5UJXPNj1W&p=oo) | Instant removal with [SafeUnsubscribe](http://visitor.constantcontact.com/d.jsp?v=001_E1ee4Kj9gCH_BKWU7wgMlCiP74iJvBklhqOHCV1cGKbiYMB07hgZ6v5UJXPNj1W&p=un)™ | [Privacy Policy](http://ui.constantcontact.com/roving/CCPrivacyPolicy.jsp). | [Email Marketing](http://www.constantcontact.com/index.jsp?cc=TEM_News_200) by |   American Society of Exercise Physiologists | Dept. of Exercise Physiology | College of St. Scholastica | 1200 Kenwood Avenue | Duluth | MN | 55811 |