Summary: Although the benefits of regular physical activity are widely acknowledged, recent epidemiological findings indicate that a growing number of youth are not as active as they should be. The impact of a sedentary lifestyle during childhood and adolescence on life-long pathological processes and associated health care costs have created a need for immediate action to manage, if not prevent, unhealthy behaviors during this vulnerable period of life. “Exercise deficit disorder’ or EDD is term used to describe a condition characterized by reduced levels of regular physical activity that are below recommendations consistent with positive health outcomes. The identification of physically inactive children early in life and the prescription of effective exercise interventions to prevent the cascade of adverse health outcomes later in life is needed to focus on primary prevention and impact the collective behaviors of fitness professionals, health-care providers, government officials, school administrators, public health agencies and insurance companies. In this session, the causes of exercise deficit disorder will be discussed and potential solutions that link health-care with fitness-care will be explored.

Introduction and overview:

a. First things first
b. What’s all the fuss about?
c. Contemporary trends in obesity and physical activity

1) Physical activity early in life is preventative medicine
a. Identifying risk of obesity in school-age youth
b. MVPA and fat mass in children
c. The decline in physical activity may start by age 6
d. A vortex of physical activity and adverse health outcomes

2) We need to identify and treat physical inactivity
a. Exercise as a ‘fifth vital sign”
b. Exercise deficit disorder (EDD)
   i. Identifies inactive youth
   ii. Focuses on prevention
   iii. Raises public awareness
iv. Educates families
   c. “Non-disease” and hypoactivity: Is this kid health?
   d. How can we diagnose EDD in youth?
   e. How much and what type of physical activity do children really need?
   f. What does the data say? Build motor skill competence and confidence

3) It’s all about qualified instruction and sensible progression
   a. The developing brain and motor skill development
   b. Fundamental principles of pediatric exercise science
   c. What is integrated neuromuscular training?

4) Train the brain
   a. Is there a critical window during the growing years?
   b. Enhancing competence in motor skill performance: step by step

5) Link fitness care with health care
   a) Program ideas
   b) Challenges ahead: What do the critics say?
   c) Where do we go from here?

At the end of this session, participants will be able to:
1) Recognize physical inactivity as a modifiable risk factor in youth;
2) Identify the characteristics of exercise deficit disorder and discuss potential public health implications;
3) Use practical suggestions for linking fitness care with health care to evaluate a child’s current physical activity status and propose a management plan that includes treatment as well as follow-up.

Selected References and Websites

- Church T, Blair S. When will we treat physical activity as a legitimate medical therapy...even though it does not come in a pill? *Brit J Sport Med*. 2009;43:80-1.


Useful websites for more information on youth physical activity:

www.acsm.org
www.aahperd.org
www.cdc.gov
www.exerciseismedicine.org
www.health.gov
www.naspem.org
www.strongkid.com