

Info
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pp.71 - 75

BOOK REVIEWS

Ultimate Sports Nutrition. (2nd ed.) by Ellen Coleman & Suzanne N. Steen. Published by Bull Publishing Company, USA, 2000 (205 pages).

The book begins with an introduction to the various food nutrients, their functions, and sources. The Food Guide Pyramid is recommended as a healthful eating guide for both athletes just as it is for non-athletes. In general, a good diet consists of high carbohydrate, particularly complex carbohydrates with a variety of fruits, vegetables, low saturated fat, cholesterol and moderate in total fat. Limiting sugar and salt intake is recommended.

Energy is produced through the cellular energy production systems. The type of food component the body uses as fuel depends on the following factors: exercise intensity, duration, and training level. As a rule, low to moderate-intensity exercises use both fat and glucose as the sources of fuel, whereas high intensity exercises use glycogen (stored form of glucose). Short exercise duration burns carbohydrates for energy, and as the duration increases, the body resorts to fat as the secondary energy source. Endurance training, will use fat as fuel while sparing muscle glycogen.

Athletes need to eat sufficient amounts of food before training or competition. The amount eaten depends on the timing of the meal. Smaller meals are eaten close to the time of training or competition, whereas larger meals can be eaten hours before the event. It is recommended that a high carbohydrate meal be eaten one to four hours before training or competition. Liquid meals are recommended just before competition or be taken during an extended-time competition, or heavy training. They are used as supplements rather than substitutes for regular meals. Nutrient dense complex carbohydrates provide not only the energy needed, they also contain both soluble and insoluble fiber, minerals and vitamins. Carbohydrate loading a few days before an endurance exercise event such as a marathon, will increase the muscle storage of glycogen for fuel during the strenuous event.

The protein needs of an athlete are slightly higher than a non-athlete. Endurance athletes should consume 1.2 to 1.4 grams of protein per kilogram body weight/day compared to 0.8 gram per kilogram body weight/day for sedentary individuals. In addition, strength athletes need about 1.6 to 1.7 grams per kilogram

April 2004, Vol. 7, No. 1

body weight/day. Commercial amino acid supplements do not directly contribute to the body's protein need and hence, render their claims invalid. High-protein diets and supplements are also unnecessary and may even cause harm.

Fat consumption should be kept to the recommended amount with a majority of the fat coming from unsaturated and cholesterol-free sources. This rule also applies to people who are involved in low-intensity exercise even though their body may use a greater percentage of fat for fuel. This is because the rate at which fat is burned is slow, i.e., 4 to 5 calories per minute, compared to 10 to 15 calories per minute for high intensity exercises.

Vitamins and minerals are essential for bodily functions. As much as possible, let these be provided by food. Liberal supplementation of vitamins and minerals may not be necessary and can actually be harmful.

A large percentage of our body is made up of fluids. Therefore, adequate hydration is essential for bodily functions and survival. Fluid is constantly being lost during exercise and therefore needs to be replenished. A regular schedule for fluid intake is necessary as thirst is not a reliable indicator for fluid need. Electrolyte replacement is also vital as part of fluid replacement. Alcohol and caffeine are not recommended as fluid replacers.

An important element in knowing whether one is lean or overweight is to know his/her body composition. Weight scales are not to be used as the absolute guide in this. Body composition can be assessed through underwater weighing and anthropometry measurements.

For overweight or obese persons desiring to lose weight, care should be given that the loss is in body fat and not muscles. Many quick fix weight loss programs are available in the market. Some of them actually cause the loss of body fluids while others, muscles. Gradual and sustained weight loss can be achieved through a sensible eating pattern and an increased physical activity.

There are also a myriad of so called "health products" on the market that make bold claims for health improvement. Some claim to be natural herb products, whereas, the ingredients actually contain very potent properties that have adverse effects on the body. Often, it is unnecessary to spend money on these supplements.

The author has given some useful tips on healthful food choices at different food stops while traveling. This is made possible due to a certain demand for these food items. Therefore, it is possible to continue on a healthy eating pattern even while on the road or in the air.

Eating disorders can be a serious problem in our society. Ladies in particular are prone to this problem due to the societal value of being lean as seen beautiful and, which discriminates against being overweight or obese. On the other hand, the young and growing athletes need special attention in ascertaining that their growth is normal. There is a need to properly guide the young ones to a right concept of nutrition and to eat well for health and for athletic performance.

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Lessons from the Cyberspace Classroom: The Realities of Online Teaching, by Rena Palloff and Keith Pratt. Published by Jossey-Bass. A Wiley Imprint, San Francisco, CA 2001 (204 pages).

Rena Palloff's experience includes work in both health care and academic settings. She holds master's degrees in social work and organization development, and a PhD in human and organizational systems. She serves as faculty at Fielding Institute in the United States, and adjunct faculty at other colleges and universities. She has taught in the Institute's online degree program in Organizational Management for many years. Keith Pratt has a business and computer systems background. His master's degrees are in human resource management and in organizational development. He also holds a PhD in human and organizational systems. His work experience includes supervisor of computer systems maintenance, registrar, faculty, trainer, and consultant, with many years of online teaching experience. He currently works with a number of community colleges in the United States. Besides this book, Palloff and Pratt are co-authors of *Building Learning Communities in Cyberspace: Effective Strategies for the Online Classroom*, *the Virtual Student: A Profile and Guide to Working with Online Learners*, and *Collaborating Online: Learning Together in Community* (Jossey-Bass Guides to Online Teaching and Learning). Together, Palloff & Pratt manage the Crossroads Consulting Group, giving presentations on online teaching, and consultation to academic institutions.

As online teaching and learning become more commonplace, educators and students will need support to successfully access this modality. Administrators will want to know what is involved in offering courses online. Teachers will need to know how they can adapt their courses and teaching to the online environment. Students will want to know how online learning is different, how expectations differ, and if they are suited to this style of learning. Palloff and Pratt describe the

International Forum

uniqueness of online teaching and learning and address issues important to administrators, teachers, and students.

The book is divided into two parts. The first part addresses general issues of online education. This includes a description of what types of programs are being offered, and administrative concerns of offering courses online. It describes issues relevant to teachers thinking of teaching an online course. It also reviews the technical aspects of online teaching, including computer requirements and available course software. The second part delves into specifics for teachers and students. It describes how to transform a course for the online environment, and discusses issues involved when teaching a course that has been prepared by someone else. Specific needs of online students are discussed, as well as attributes that help to make the online learner successful. The special dynamics of an online classroom are explored, and tips are given for solving problems that may occur. The section closes with specific lessons learned thus far from online classrooms.

Switching to online teaching is not something that happens overnight. Some teachers may be excited about the possibilities while others may be reluctant to change to something unknown. They may need training in computer skills, so they can feel comfortable and confident that they can conduct a course in the online environment. They will need to be able to use the software employed for course delivery. Extra time will be required for course development, and for actual online teaching. Loads may need to be adjusted so that teachers can prepare adequately. Teachers will need training to understand which types of teaching techniques are best suited to the online environment, and which do not work very well.

Students also need assistance before beginning online courses. Students are used to the face-to-face environment, in which they conform to a set schedule of classes and assignments. They are used to the stimulus and reinforcement of the teacher's comments and grades. The teacher generally lectures on the material and while students take notes. Much of learning occurs by this passive transfer of information. In the online classroom, students need to take much more personal responsibility for their learning, actively seeking out the information they need. Without a set schedule of classes, they must personally schedule their time to work. Discussion requirements do not allow them to hide in the back of the class unnoticed. To earn their grade, they must think about their learning and apply it in discussion forums. The reflective type of thinking involved in discussion forums may be new to students, who are used to knowledge and understanding types of questions. Students may also need technical support to know how to use the course site, or they may have difficulties with the course site because of their computer system.

I found this book to be extremely helpful as I developed and taught my first online course. It helped me to think through the technical process, organization, and

formatting issues to make my course attractive and easy to use. It helped me to formulate my teaching plans and techniques specific to the online environment. I became aware of the importance of developing a learning community for effective teaching and learning to occur. I was impressed with the need for clear communication, regarding course expectations, and how a student might succeed in the course.

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