

A New Beginning for American Academy of Nutrition

Same Quality Standards, New Programs.

By Gene Bruno, M.H.S.
Dean of Academics

Not only is American Academy of Nutrition (AAN) the first nutrition-oriented, distance learning college to attain national accreditation by the Accrediting Commission of the Distance Education and Training Council (the only accrediting agency for home study recognized by the U.S. Department of Education), but its high standards and reputation for providing a quality education in nutrition is recognized internationally.

New educational programs

Those same quality standards will also be applied to new educational offerings at AAN. Following is a review of new programs soon available, as well as those being developed.

Master of Science in Nutrition

First, we're rolling out the M.S. in Nutrition degree program. I wish we (the new partners) could say that we had been involved in its development, but this degree program was finished and accredited before we joined AAN. However, we do have the honor of being involved in its introduction to AAN alumni, and to the public at large. For more information about this world-class Master's program, read the article by Dr. Ballin entitled *Our New Master of Science in Nutrition Degree*

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New Research on the Herbal Treatment of Mild/Moderate Depression With Anxiety

St. John's Wort & Valerian

By Arthur M. Presser, Pharm.D.
President

It is not uncommon to have patients/clients say that they suffer from both depression and anxiety. A study published in the journal *Phytomedicine* concluded that the symptoms of anxiety in combination with mild to moderate depression can be improved more quickly with a combination therapy of St. John's wort extract and valerian extract versus a St. John's wort only treatment. In this study the combination was well tolerated and no significant side-effects occurred.

In a study done by Muller et al in 2003, 2,462 patients with mild to moderately severe depression were treated with one of two combinations of St. John's wort and valerian. One combination, called the 1+1 provided 500 mg of the valerian extract and 600 mg of St. John's wort extract per day. The second combination which was referred to as 2+1 provided 1,000 mg valerian extract and 600 mg St. John's wort extract per day.

The valerian product contained 500 mg of valerian root extract. The St. John's wort product contained 600 mg of the aerial parts of the plant and standardized to 3-6% hyperforin and 0.1-0.3% hypericin. The patients were evaluated three times, before treatment, three weeks after treatment and six weeks after treatment. Prior to treatment, anxiety and sleep disorders were the most severe of all the symptoms reported. These were also the symptoms that had improved significantly by the third and sixth weeks of treatment.

Data from other authors have also shown that the symptoms of sleep disorder and tension improve more quickly with a combination of 1,000 mg valerian extract and 600 mg St. John's wort extract rather than St. John's wort alone.

Based on this research it appears that combination of these two herbs are effective for treating mild to moderate depression with anxiety and that valerian

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Program.

New Diploma Programs Soon Available

In December 2004, three new diploma programs will be available in addition to the Diploma in Comprehensive Nutrition program (DipCN). [In case you're wondering about the "DipCN" initials, please read the article *The New DipCN Designation.*] These include:

- Diploma in Women's Nutrition (DipWN)
- Diploma in Natural Sciences (DipNS)
- Diploma in Small Business Management (DipSBM)

These new diploma programs utilize existing AAN accredited courses. If you're interested in pursuing any of these new diploma programs, contact 865-524-8339 for details. If you've already completed some of the courses comprising the programs, you're that much closer to earning your new diploma.

New Diploma Programs in Development

New diploma programs that are currently in development include a Diploma in Herbal Studies (DipHS), a Diploma in Sports Nutrition (DipHS) and a Diploma in Weight Management (DipWM). We anticipate the introduction of these new diploma programs sometime in 2005. Make sure to read future issues of *this* newsletter for progress updates.

Bachelor of Science in Nutrition

In addition to the new diploma programs in development, a Bachelor of Science in Nutrition degree program is also being developed. This program will likely be introduced in 2005 or 2006. We'll keep you informed on its progress.

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L-Carnitine Supplementation Increases Fatty Acid Oxidation in Healthy Adults

By Gene Bruno, M.H.S.
Dean of Academics

A new study confirms that supplementation with L-Carnitine can significantly increase fatty acid oxidation in healthy adults.

L-Carnitine occurs naturally in the human body and is frequently referred to as the "energy nutrient". This is because its primary physiological role in the human

body relates to the generation of energy from fat. L-Carnitine carries long chain fatty acids into the mitochondria where they are oxidized for energy. L-Carnitine has been popular for many years among physically active people who supplement with this amino acid to help with post-exercise recovery. Extensive clinical research indicates that L-Carnitine promotes cardiovascular health, and studies also suggest that L-Carnitine may be useful as part of a weight management program.

The present clinical study was conducted under guidance of Prof. Klaus D. Wutzke. It was set up to verify the breakthrough results published by Müller et al. (*Metabolism*, 2002) who were the first to conclusively show that oral L-Carnitine supplementation stimulates fatty acid metabolism in healthy adults. By using a different approach, namely a combined 15N-, 13C-tracer technique, the effects of oral L-Carnitine supplementation (3x1.5 g L-Carnitine L-Tartrate/day for 10 days) on long chain fatty acid oxidation in slightly overweight adults were investigated. After oral administration of the labelled fatty acids and the amino acid glycine, 15N- and 13C-enrichment in breath was measured by isotope ratio mass spectrometry. The researchers observed a significant increase in 13CO₂ exhalation after L-Carnitine supplementation, which indicates an increase in fatty acid oxidation. "We are pleased to confirm the pioneering results obtained by Müller et al. in our study", said Prof. Wutzke.

The study also showed that whereas protein synthesis and breakdown remained unchanged, indicating that there was no loss of muscle which accompanied the increased dietary fat oxidation.

According to Prof. Wutzke, "this is great news to all people who exercise, those who undergo a weight management program and those who have a high energy demand".

Wutzke KD, Lorenz H. The effect of L-carnitine on fat oxidation, protein turnover, and body composition in slightly overweight subjects. *Metabolism* 2004; 53(8):1002-1006.

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Did You Know...

Expecting mothers with a diet lacking in plant proteins, iron, magnesium, and niacin may be up to five times more likely to have a baby with spina bifida, suggests a new study from the Netherlands. *Journal of Nutrition* 2004; 134:1516-1522.

Our New Master of Science Degree Program in Human Nutrition

A World-Class Graduate Degree

By Annemaria Ballin, Ph.D.
Director of Education

After much discussion, research and consultation, a decision was made to pursue the development of a Master of Science degree program in Human Nutrition which would be completed entirely through distance learning. Naturally, since American Academy of Nutrition (AAN) would be offering the program, it had to be something special. Our goal was not only to develop a Master's program in nutrition that would be commensurate with, or exceeding the standards of any conventional university, but that also provided scientifically sound alternate practices in nutrition. I'm happy to say that our goal has been achieved.

A world-class education

AAN's Master of Science in Human Nutrition program offers a world-class graduate education, designed to help present and future health professionals understand and apply the science of nutrition. Core courses build upon students' current knowledge of the human body and basic nutrition science and promote a greater understanding of the links between diet, lifestyle and health. The curriculum provides a solid foundation in advanced nutrition sciences with courses in clinical nutrition, herbal and nutrition therapy, nutrition research and current trends in the field of nutrition. Elective courses explore nutrition counseling, nutrition in the community and among other cultures, and alternative and complementary medicine. Student progress is evaluated through written and oral assignments, practical exercises, research projects, and written, proctored exams. The M.S. program will be offered with either a thesis or non-thesis option. In the thesis option, a thesis developed and defended by the student further develops research and critical thinking skills crucial in the dynamic field of nutrition. Two additional courses and a capstone project will take the place of the thesis in the non-thesis option.

Designed for health care professionals and others

Both the thesis (35 credit hours) and non-thesis (37 credit hours) options for the M.S. in Human Nutrition program were designed with health care professionals in mind. It's ideal for registered dietitians who desire

to expand their skills and knowledge, and increase their marketability in today's competitive job market. It's also appropriate for physicians, nurses, pharmacists, physical therapists and personal trainers who often receive little or no nutrition training; and who would like to strengthen their relationship with the patients/clients through knowledge of nutrition science and counseling techniques. Finally, entrepreneurs and managers in the food or supplement industry who wish to expand and enhance their businesses with the ability to offer nutrition services to these customers, may also benefit by this graduate program.

The M.S. program courses

The Master of Science in Human Nutrition program consists of the following 10 graduate level courses which includes a thesis:

<u>Core Courses for both options</u>	<u>Credits</u>
• 510 Advanced Biochemistry	4
• 520 Advanced Nutrition	4
• 530 Nutrition Assessment	4
• 540 Clinical Nutrition	3
• 550 Nutrition Research	4
• 560 Current Trends	3
• Two electives (see below)	6

<u>Thesis option</u>	<u>Credits</u>
• 610 Thesis Part I	3
• 620 Thesis Part II	4
Total credits – Core & thesis option	35

<u>Non-thesis option</u>	<u>Credits</u>
• Two more electives (see below)	6
• Capstone project	3
Total credits Core & non-thesis opt.	37

<u>Electives</u>	<u>Credits</u>
• 572 Life Span Nutrition	3
• 574 Community Nutrition	3
• 576 Food & Culture	3
• 578 Herbal Therapies & Alt. Healing	3

Tuition and prerequisites

The total tuition for the M.S. program is \$9,870 for the thesis option and \$10,440 for the non-thesis option. The academic prerequisites for acceptance into the M.S. program include: 1) Bachelor's degree from a college or university accredited by an accrediting agency recognized by the Secretary of the U.S. Department of Education; or international equivalent. 2) Completed coursework from a similarly accredited institution in Nutrition I, General Chemistry, Human Biology, Organic Chemistry, Biochemistry, Anatomy and Physiology, and Statistics. (*Note: With the*

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exception of Statistics, American Academy of Nutrition offers the other course prerequisites.)

Questions?

If you have any questions or would like more information about the new M.S. degree program in Human Nutrition, please contact 865-524-8339 for details.

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Diploma in Comprehensive Nutrition Graduates Can Use the New Dip.C.N. Designation

Same Quality Standards, New Programs.

By Gene Bruno, M.H.S.
Dean of Academics

Those of you who have earned the Diploma in Comprehensive Nutrition know what a significant undertaking it was to complete this academic program. Unfortunately, in previous years there were not any initials designated for use after your name to indicate the completion of this program, as would be the case with the completion of an associate's degree (A.S.) bachelor's degree (B.S.), etc.

Use the new Dip.C.N. designation

Good news! We have now assigned an appropriate designation for all graduates of this diploma program: "Dip.C.N." Please begin proudly using the Dip.C.N. designation after your name (e.g., Joan Smith, Dip.C.N.). Use it on your business cards, your stationary, your e-mail signatures, or any other professional correspondence.

Strictly an academic designation

Please note that the Dip.C.N. designation is strictly an indication you have successfully completed this academic program. It is the equivalent of using the A.S. or B.S. designation after a name for individuals who have completed those degree programs. It is not an indication of a "nutritionist credential" such as "R.D." for registered dietician (American Dietetic Association) or "C.N.S." for certified nutrition specialist (American College of Nutrition, Certification Board), which are awarded on the basis of independent state or national board exams. Nor should the Dip.C.N. designation be confused with American Health Science University's C.N.™ (Certified Nutritionist™) designation which is a

trademarked term indicating that the individual has completed a six-course diploma program; and not a credential resulting from an *independent* board exam by a third-party agency.

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Herbal Treatment of Depression - Continued from page 1

may provide a quicker improvement in anxiety symptoms.

Muller D, Pfeil T, von den Driesch V. Treating depression comorbid with anxiety – results of an open, practice-oriented study with St. John's wort WS 5572 and valerian extract in high doses. *Phytomedicine* 2003;10(suppl IV):25-30

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Did You Know...

Whey protein is more effective than red meat in reducing body weight gain and increasing insulin sensitivity, shows a new study on rats. *Journal of Nutrition* 2004; 134:1454-1458.

Taking chondroitin sulfate supplements over short periods significantly relieved pain and improved mobility in patients with knee osteoarthritis, according to researchers. *Osteoarthritis and Cartilage* 2004; 12:269-276.

Adding zinc to standard antimicrobial treatment may accelerate recovery from pneumonia, say researchers. *Lancet* 2004; 363:1683-88

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Education News & Research Reviews

This newsletter is a copyrighted publication of the American Academy of Nutrition – College of Nutrition & Integrative Health Sciences (AAN). Unauthorized duplication is prohibited. However, a subscription is free. As the name suggests, the purpose the newsletter is to provide students and alumni with information about the happenings at AAN, as well and reviews about pertinent research in the field of health, nutrition, herbal medicine and dietary supplement science.