

FEBRUARY 2004 | VOLUME 29 | NUMBER 1

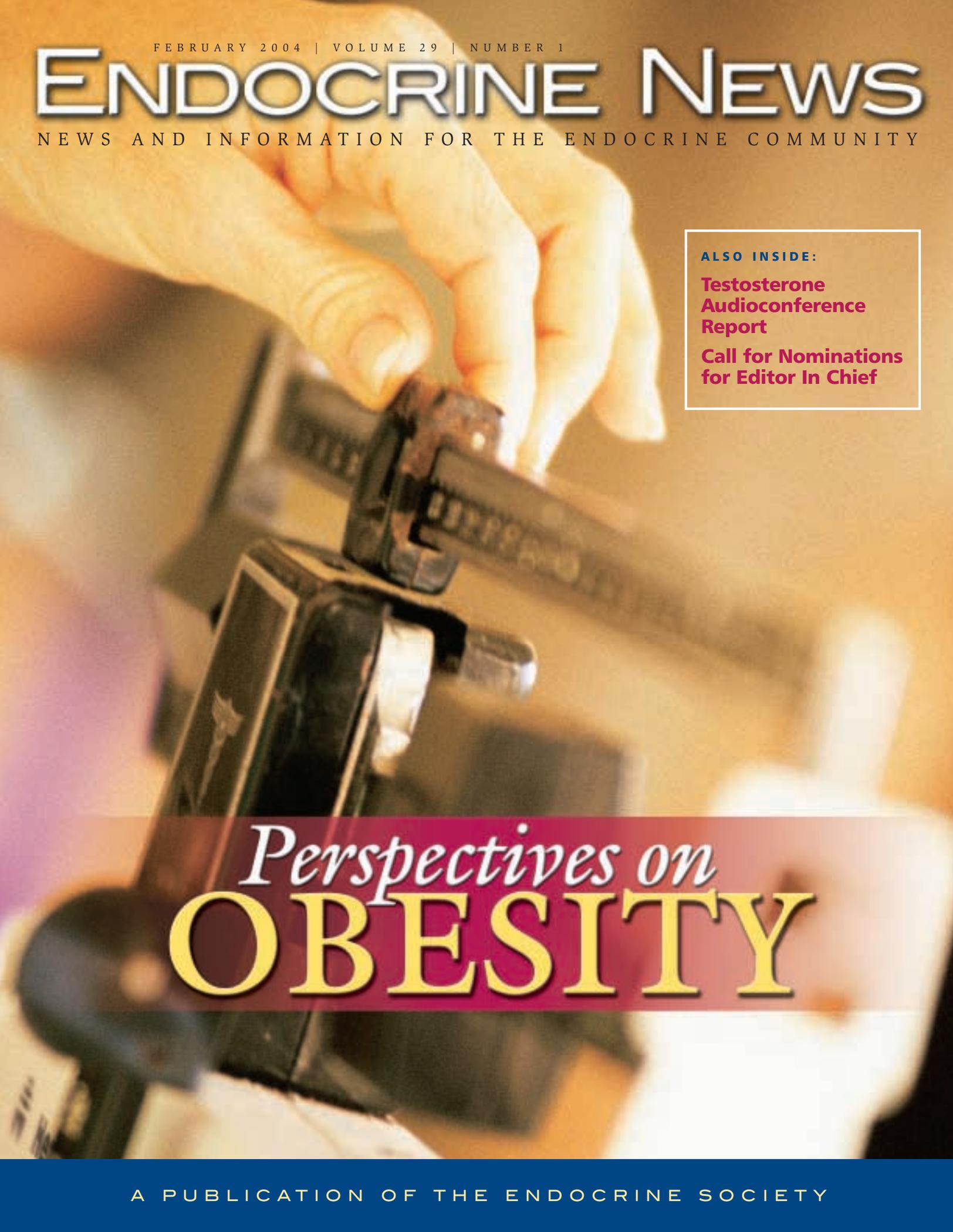
# ENDOCRINE NEWS

NEWS AND INFORMATION FOR THE ENDOCRINE COMMUNITY

ALSO INSIDE:

**Testosterone  
Audioconference  
Report**

**Call for Nominations  
for Editor In Chief**



*Perspectives on*  
**OBESITY**

A PUBLICATION OF THE ENDOCRINE SOCIETY



## **ENDO 2004** NEW ORLEANS • JUNE 16-19

# REGISTER FOR ENDO 2004 BY APRIL 23RD AND SAVE!

**The Endocrine Society's 86th Annual Meeting**  
**Wednesday, June 16 - Saturday, June 19 - New Orleans**  
**Focus: Obesity, Endocrinology and the Future**

Join thousands of researchers, clinicians, clinical investigators, fellows, post docs, students, and other professionals from around the world to hear about advancements in the field of endocrinology. This meeting, the largest gathering of its kind, is a once-a-year opportunity to learn the latest scientific and clinical developments in endocrinology and look at new products and services that will aid in the research, treatment, and prevention of endocrine disorders.

- More than 275 Speakers
- Over 60 Symposia
- Over 140 Meet-the-Professor Sessions
- 14 Plenary Lectures
- More than 2,000 Poster Presentations

### **Highlights of ENDO 2004**

- Focus on "Obesity, Endocrinology and the Future," includes a series of basic and clinical plenary lectures, symposia, and oral and poster presentations and other special activities highlighting this topic.
- Corporate Liaison Board Forum related to the focus on obesity
- Pre-Conference Thyroid Sonography Hands-On Workshop
- Career Development Workshop for Trainees
- Symposium dedicated to the presentation of results from the latest clinical trials in endocrinology
- Placement Service Job Fair (register online at <http://www.endo-society.org/placement/index.cfm>)
- Clinical Trials Network Exchange area on the exhibit floor to find out about opportunities to participate in clinical trials
- And much more!

### **Visit Exhibits & More!**

Approximately 200 companies will display a wide range of products and services of interest to researchers and clinicians. Representatives from pharmaceutical manufacturers, medical suppliers, clinical diagnostic and research-based companies, publishers, and non-profit medical groups are eager to meet you and answer your questions. Read and relax at the Research Park area of the exhibit hall featuring research-oriented exhibitors and a reading area. And catch the latest on clinical trials education and investigator networking opportunities at the Clinical Trials Network Exchange.

### **Visit [www.endo-society.org](http://www.endo-society.org)**

- View ENDO 2004 program information as it becomes available
- Register and make housing reservations online
- Coming in April 2004, plan your schedule in advance using the ENDO 2004 Science Planner, a searchable database of the abstracts scheduled to be presented, and the ENDO 2004 Exhibit Planner, a searchable database of exhibitors with their product and service information

Look for your ENDO 2004 Final Program and Registration Brochure in the mail this spring. To request a brochure for a colleague, please send mailing address to [societyservices@endo-society.org](mailto:societyservices@endo-society.org)

### **The Endocrine Society would like to recognize the following for their support of ENDO 2004:**

Abbott Diagnostics ■ Abbott Laboratories ■ Abbott Renal Care ■ Paul F. Glenn Sponsorship Fund in cooperation with the American Federation for Aging Research ■ Amylin Pharmaceuticals ■ AstraZeneca ■ Auxilium Pharmaceuticals, Inc. ■ Aventis Pharmaceuticals  
Columbia Laboratories, Inc. ■ Diagnostic Products Corporation ■ Eli Lilly & Company ■ Genentech, Inc. ■ Genzyme Corporation  
GlaxoSmithKline Pharmaceuticals ■ Ipsen Pharmaceuticals ■ King Pharmaceuticals ■ Merck & Company  
Merck Research Laboratories ■ Novartis Pharmaceuticals ■ Novo Nordisk Pharmaceuticals  
NPS Pharmaceuticals, Inc. ■ Ortho-McNeil Pharmaceuticals, Inc. ■ Pfizer, Inc. ■ Procter & Gamble Pharmaceuticals  
Quest Diagnostics ■ Solvay Pharmaceuticals, Inc.

(Sponsors as of 12/09/03)

[www.endo-society.org](http://www.endo-society.org)



# CONTENTS

FEBRUARY 2004 | VOLUME 29 | NUMBER 1



6

## ENDOCRINE NEWS™

*Endocrine News is published by*

### THE ENDOCRINE SOCIETY

8401 Connecticut Ave., Suite 900  
Chevy Chase, MD 20815

Phone (301) 941-0200 | Fax (301) 941-0259  
[www.endo-society.org](http://www.endo-society.org)

E. Chester Ridgway, M.D., President  
(303) 315-8443  
email: [e.chester.ridgway@uchsc.edu](mailto:e.chester.ridgway@uchsc.edu)

Anthony Means, Ph.D., President-Elect  
(919) 681-6209 | email: [means001@mc.duke.edu](mailto:means001@mc.duke.edu)

Margaret A. Shupnik, Ph.D.,  
Secretary-Treasurer  
(804) 982-0010 | email: [mas3x@virginia.edu](mailto:mas3x@virginia.edu)

John D. Baxter, M.D., Past President  
(415) 476-3166 | email: [jbaxter918@aol.com](mailto:jbaxter918@aol.com)

Scott Hunt, Executive Director  
(301) 941-0205 | email: [shunt@endo-society.org](mailto:shunt@endo-society.org)

Susan Koppi, Director, Public Affairs  
(301) 941-0252 | email: [skoppi@endo-society.org](mailto:skoppi@endo-society.org)

Marisa Lavine, Editor  
(301) 941-0255 | email: [mlavine@endo-society.org](mailto:mlavine@endo-society.org)

Tadu Yimam, Assistant Editor  
(301) 941-0251 | email: [tyimam@endo-society.org](mailto:tyimam@endo-society.org)

Please send comments and suggestions for  
Endocrine News to [ESN@endo-society.org](mailto:ESN@endo-society.org)

Design: IconoGraph Designs, Inc. (301) 590-2915



Endocrine News™ is a trademark owned by  
The Endocrine Society

## FEATURES

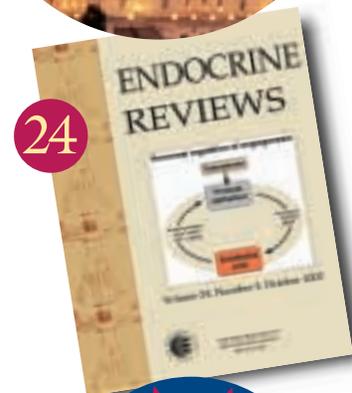
- 6 Perspectives on Obesity**  
A basic researcher, clinical researcher and clinician-in-practice share their views about the best dietary approaches for obesity treatment



5

## DEPARTMENTS

- 4 President's Message**
- 5 Legislative Update**
- 11 Hormone Foundation Patient Pullout**
- 13 Testosterone Audioconference**
- 18 Endocrine Society 2004 Election**
- 20 Ethical Issues**
- 22 Coding Corner**
- 23 Society Spotlight: Animal Research**
- 24 Call for Nominations**
- 25 Endocrine Edge**
- 26 World Wide Endocrine Calendar**
- 26 Endocrine Nurses**



24



18



20

**Dear Colleagues,**

So, how do you like the appearance and potential of our 'new' communication strategy?

As The Endocrine Society grows and flourishes, our services to the endocrine community must also be enhanced. Over the last few years, our newsletter has informed members about the many activities of the Society. It has also allowed the Society's leadership to communicate directly with colleagues in the membership. As our organization moves forward, it is important to adapt our publication to fit the needs of not just the Society's members, but also the entire endocrine community, which is continually growing and changing as well.

As you can see, there are many exciting changes in this issue of The Endocrine Society's newsletter. Extensive thought and hard work went into these alterations. The leadership and staff of The Endocrine Society sincerely hope that you, our members, enjoy and appreciate these changes in this and future issues. I am particularly enthusiastic about these enhancements and would like to highlight a few of the new features.

**A New Name**

The first change that you may have noticed is the name of this publication—*Endocrine News*. As I mentioned above, the former newsletter, *Endocrine Society News*, focused solely on Society activities and information for members. Consistent with the thrust of the Society's Strategic Plan, one of the goals in changing the newsletter was to reach a broader audience within the endocrine community, beyond Society members. The new name reflects this extended audience as well as our goal of inclusivity for all of our activities.

**Four-Color**

Another change is the transition from a two-color to a four-color publication. This change helps us move from a simple newsletter that focused on a small window of Society activities to a magazine-style publication featuring news and information for the entire-endocrine community. The four-color version will also allow us to run color photos, ads and graphics, which will enhance the visual appeal of the product.

**Increased Distribution**

Besides the physical changes to the newsletter, *Endocrine News* has an increased circulation of approximately 25,000 individuals. As noted above, rather than just sending the newsletter to Society members, it will be shared with non-member journal subscribers and non-member meeting attendees so that they can learn about

the exciting activities of The Endocrine Society as well as the latest news and issues that have an impact on the endocrine community.

**Content Changes**

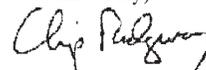
Finally, and most important to me, the contents of the newsletter are expanded and enhanced. You will still see several of the existing sections, such as a President's message, coding information, the legislative update, ethics articles and a calendar of events. Additionally, Society news and information are included in a special section of each issue called "Endocrine Society Update." However, *Endocrine News* also includes several brand new venues. We will offer feature articles on current issues relating to the field of endocrinology as well as information on the latest endocrine research and developments that are currently in the media spotlight.

One really novel addition is a 'point/counterpoint/counterpoint' section, in which a basic researcher, clinical researcher and clinician-in-practice will discuss their views on a specific endocrine topic. I am especially excited about this exercise because it will bring together our three constituencies and foster communication, dialogue, agreement and disagreement on specific endocrine topics. In this way, we might be doing more than just 'scratching the surface' of 'translational research and medicine.' This first issue includes a point/counterpoint/counterpoint discussion of obesity featuring pieces by Drs. Donald Hensrud, Randy Seeley and Barbara Rolls.

We are also adding patient fact sheets to each issue of the newsletter. These fact sheets are prepared by our Hormone Foundation. Each issue of the newsletter will feature a fact sheet on a different endocrine disease. These materials will be printed with a perforated edge so that practicing physicians can pull them out and distribute the information to patients.

I hope that these changes will help *Endocrine News* serve as a mechanism to communicate the important work of the Society and the current happenings in endocrinology to more of our community. If you have comments, concerns or suggestions regarding *Endocrine News*, I encourage you to send them to me ([president@endo-society.org](mailto:president@endo-society.org)) or to [ESN@endo-society.org](mailto:ESN@endo-society.org) **EN**

Sincerely,



**Chip Ridgway**

President, The Endocrine Society



Chip Ridgway, M.D.

**“All things must change to something new, to something strange.”**

—Henry Wadsworth Longfellow

# The Endocrine Society Enjoys A Productive Year of Legislative and Regulatory Progress

## Lawmakers Conclude First Session of the 108th Congress

Prior to leaving Capitol Hill for the holidays and the conclusion of the first session of the 108th Congress, lawmakers acted on a variety of important health care legislative issues, including the largest expansion of a federal entitlement in decades. Following Congressional passage in late November, President Bush signed a new Medicare prescription drug bill. This revision of Medicare is the most significant change to the health care program for the elderly and disabled Americans since it was created in 1965. The Endocrine Society joined with the American Medical Association (AMA) in working to include a provision in the Medicare legislation

With regard to annual federal funding for the National Institutes of Health (NIH), the House of Representatives acted on December 8th to pass a consolidated appropriations act that would provide NIH with \$27.982 billion in 2004—an increase of about three percent from 2003. At press time, the Senate was still debating final passage of this critical funding measure, but are not expected to dramatically raise the amount of funding. The Endocrine Society's government relations team focused significant attention during the last year on increasing the overall budget of the NIH, including personal meetings on Capitol Hill

Nutrition and Physical Activity Act," in both the House and Senate. Prior to leaving Capitol Hill for the holiday recess, the Senate Committee on Health, Education, Labor and Pensions (HELP) approved its version of this important legislation. In addition to support for the IMPACT legislation and raising the issue of obesity on Capitol Hill, The Endocrine Society has been working the Office of the Secretary of the Department of Health and Human Services, Tommy Thompson, as well as the Office of Disease Prevention and Health Promotion on additional public awareness campaigns.



**In addition to garnering support and raising the issue of obesity on Capitol Hill, the Endocrine Society has also been working the Office of the Secretary of the Department of Health and Human Services, Tommy Thompson, as well as the Office of Disease Prevention and Health Promotion.**

that would avert another 4.5 percent physician fee cut scheduled for next year. The Society's advocacy activities proved to be very successful and resulted in a positive increase of no less than a 1.5 percent update for all providers in 2004 and 2005. The inclusion of this provision was due in large part to an overwhelming grassroots effort from AMA and Society members. For more information about this legislation and its endocrine-related provision, please visit our advocacy website at <http://www.endo-society.org/pubrelations/advocacy.cfm>

with targeted decision-makers on key committees jurisdiction over the operations of the Department of Health and Human Services (HHS). The Society also met with the Office of the Secretary of HHS, and participated in coalition efforts with FASEB, Research!America and others to gain further support for increased research resources.

Endocrine Society President, Chip Ridgway, MD, has chosen the topic of obesity as the theme for his term as President of the organization. The Society has again successfully introduced the "Improved

The second session of the 108th Congress is scheduled to convene in late January of 2004. During the month of Capitol Hill recess, The Endocrine Society government relations team is utilizing this Congressional "down-time" to meet with the offices and staff of targeted Members of Congress to prepare and advance the Society's legislative and regulatory agenda in the new year. **EN**

*For additional information about The Endocrine Society's legislative activities, please contact Chris Rorick at [rorick@endo-society.org](mailto:rorick@endo-society.org) or 301-941-0254.*



# Perspectives 3 On Obesity

*The following is a tri-point perspective from a basic researcher, a clinical researcher and a clinician-in-practice on the following question: What are the best dietary approaches for obesity treatment?*



*Randy J. Seeley, Ph.D.*



*Barbara J. Rolls, Ph.D.*



*Donald D. Hensrud,  
M.D., M.P.H.*

## BASIC RESEARCHER VIEW

# Can animal models provide information about dietary approaches for obesity?

Randy J. Seeley, Ph.D.

Department of Psychiatry, University of Cincinnati

The daunting increase in obesity underscores the need for additional research that focuses upon how different aspects of the diet impact energy balance over time. Experiments using non-human animal subjects have a number of advantages in trying to address this important set of issues. First, the simple act of measuring one side of the energy equation, calorie intake, accurately is exceedingly difficult in free-living humans over durations beyond one or two meals. Second, assuring that free-living humans comply with a particular dietary regimen is also quite difficult. Third, both the history and genetic make-up of humans involved in dietary studies is highly variable and such individual differences are difficult to study without extremely large numbers of experimental subjects. All three of these points can be addressed by the use of non-human animals, particularly rodents in well-designed experiments.

Despite these clear advantages of animal studies, there are numerous limitations of using non-human animals to explore these dietary issues. The most obvious limitation is that the physiology of humans and other animals could differ significantly. While this difficulty is omnipresent, other more practical problems probably are of greater concern. First, while compliance can be assured in these animal studies, it is difficult to use animal models to assess how difficult compliance may be for humans on the same regimen. For example, it is clear that feeding rodents relatively unpalatable diets results in sustained lower body weights. However this would be a difficult dietary strategy

to advocate for humans where palatable food is highly sought after. Second, the overwhelming majority of studies examining the effect of diet composition on energy balance limits food choice to a single nutritionally complete food item. While the experimenter can be assured that the subjects are consuming what the experimenter intends them to consume, humans in developed countries are

hydrate diets to induce weight loss. Several clinical trials have now shown that in a period of 6 months, very low carbohydrate diets produce weight loss approximately double that of more typical low-fat dietary regimens<sup>2-5</sup>. In contrast, in several rodent studies have observed no appreciable weight loss. While such discrepancies could be due to differences in the degree of

**A reasonable body of rodent literature points to the fact that diets with a lower glycemic index and less insulin secretion results in less body weight gain than higher glycemic index diets.**

typically faced with a dizzying array of food choices every day. These problems can be illuminated by two examples.

A reasonable body of rodent literature points to the fact that diets with a lower glycemic index and less insulin secretion results in less body weight gain than higher glycemic index diets. Unfortunately the degree to which this is predictive of the body weight response to these diets in humans is limited by the fact that the carbohydrates that induce insulin secretion are rarely consumed in isolation and thus the rate at which carbohydrates appear in the blood stream can be highly variable. Thus the degree to which the glycemic index of the human diet predicts the demand for insulin secretion is far less clear in humans than in the rodent experiments designed to model these phenomena.

A second example comes from the recent work aimed at evaluating the effectiveness of very low carbo-

hydrate restriction necessary to produce ketosis between the two species, another possibility is that very low carbohydrate diets greatly reduce the variety of foods typically consumed by humans. However, in the rodent situation, the animal goes from having one single food to consume to a different single food to consume and therefore the animal has experienced no change in the number of food options available. The important point here is not that there is any direct evidence that changes in food choice underlie the effects of very low carbohydrate diets but rather that it is difficult to address these types of potentially important issues in the animal models. Thus while it would be attractive to test a number of proposed "fat" diets in animal models, efficacy in these rodent models is subject to both false positives and false negatives.

In general the animal models support the contentions forwarded by the companion pieces to this one.

Diets lower in saturated fats and in caloric density promote less weight gain overall<sup>6</sup>. However, simple changes in caloric density without significant changes in diet composition are accurately compensated for under most conditions. Giving rodents access to multiple types of highly palatable food also results in more weight gain than do diets of limited choice. While such data support the use of these dietary regimens in humans, the critical questions that can now be asked using rodent models is what genes and proteins contribute to this propensity to gain weight on varied, palatable, calorically dense diets. The powerful ability to alter the mouse genome has made rapid advances in this arena possible. As a consequence, these kinds of basic research tools will not only help us identify potentially useful dietary

regimens but will help us understand why specific individuals are more susceptible to weight gain when exposed to modern diets. Armed with this knowledge, our ability to design therapeutic options that encompass both dietary and non-dietary interventions for obese patients (or those at risk for developing obesity) will increase. **EN**

#### REFERENCES

- <sup>1</sup> Pawlak, DB, JM Bryson, GS Denyer and JC Brand-Miller. High glycemic index starch promotes hypersecretion of insulin and higher body fat in rats without affecting insulin sensitivity. *J Nutr*, 2001. 131(1): p. 99-104.
- <sup>2</sup> Brehm, BJ, RJ Seeley, SR Daniels and DA D'Alessio. A randomized trial comparing a very low carbohydrate diet and a calorie-restricted low fat diet on body weight and cardiovascular risk factors in healthy women. *J Clin*

*Endocrinol Metab*, 2003. 88(4): p. 1617-23.

- <sup>3</sup> Westman, EC, J Mavropoulos, WS Yancy and JS Volek. A Review of Low-carbohydrate Ketogenic Diets. *Curr Atheroscler Rep*, 2003. 5(6): p. 476-83.
- <sup>4</sup> Samaha, FF, N Iqbal, P Seshadri, KL Chicano, DA Daily, J McGrory, T Williams, M Williams, EJ Gracely and L Stern. A low-carbohydrate as compared with a low-fat diet in severe obesity. *N Engl J Med*, 2003. 348(21): p. 2074-81.
- <sup>5</sup> Foster, GD, HR Wyatt, JO Hill, BG McGuckin, C Brill, BS Mohammed, PO Szapary, DJ Rader, JS Edman and S Klein. A randomized trial of a low-carbohydrate diet for obesity. *N Engl J Med*, 2003. 348(21): p. 2082-90.
- <sup>6</sup> Woods, SC, RJ Seeley, PA Rushing, DA D'Alessio and P Tso. A controlled high-fat diet induces an obese syndrome in rats. *Journal of Nutrition*, 2003. 133: p. 1081-1087.

#### CLINICAL RESEARCHER VIEW

## Evidence-based dietary strategies for weight management

Barbara J. Rolls, Ph.D.  
The Pennsylvania State University

**W**ith the surge in the incidence of overweight and obesity, effective dietary strategies for weight management are needed. On the surface the issue is clear-cut, simply reduce energy intake below energy expenditure; however, there is much debate and controversy over the optimal way that this should be achieved. While it is unlikely that there will ever be a single dietary strategy that fits everyone, health professionals have a responsibility to communicate to the public which strategies are considered both safe and effective.

Until recently both the scientific community and proponents of popular diets for weight loss have emphasized macronutrient intake.

This emphasis was reflected in an evidence-based report published by the National Institutes of Health in 1998 that assessed the data from 48 randomized, controlled trials of weight-loss diets<sup>2</sup>. The report found that lower-fat diets (20 percent to 30 percent of calories) promoted

of weight loss. The emphasis on fat reduction in the 1998 report was related to the fact that most of the clinical trials meeting the criteria for inclusion focused on the fat content of the diet. Since then, the emphasis has shifted to restricting carbohydrates and increasing protein. The

**Another important shift in focus has been away from the macronutrient composition of the diet towards dietary factors that affect hunger and satiety.<sup>3,4</sup>**

weight loss, but that this was due to a spontaneous reduction in caloric intake. Indeed the evidence indicated that a decrease in energy intake was the most important component

verdict is not yet in on how these alterations in the proportions of macronutrients affect long-term weight loss and health.

Another important shift in focus

has been away from the macronutrient composition of the diet towards dietary factors that affect hunger and satiety<sup>3,4</sup>. The reasoning is that since weight-loss is achieved through caloric reduction, adherence is more likely if hunger is controlled. A number of short-term studies have shown that the energy density (kcal/g) of the diet affects both the amount consumed and how satisfied people feel. The dietary component that has the biggest impact on the energy density of foods is water, which adds weight but no calories and therefore decreases the energy density. Fat increases the energy density of foods, since at nine kcal/g its energy density is more than twice that of carbohydrates and protein (both have four kcal/g). A number of studies have demonstrated that people tend to eat a consistent weight or volume of food over a day or two and that they are relatively insensitive to the calorie content. Thus, if people eat foods low

in energy density, they spontaneously eat fewer calories and they feel just as full and satisfied. If people eat foods high in energy density, they have to restrict portions to avoid excessive caloric intake. Other dietary factors that have been shown to enhance satiety are increases in fiber and protein. Using satiety and energy density as a guide to food choices leads to the foods that health professionals encourage: vegetables, fruits, whole grains, legumes and lean protein<sup>3,4</sup>.

A recent evidence-based report from the World Health Organization and the Food and Agriculture Organization of the United Nations<sup>1</sup> found that the only convincing dietary factor associated with decreasing the risk of weight gain and obesity was a high intake of dietary fiber. The only convincing dietary factor that increased this risk was a high intake of energy-dense micronutrient-poor foods. The key to weight management is prevention

of weight gain and this will require innovative strategies to reduce the energy density of the diet. **EN**

#### REFERENCES

- <sup>1</sup> *Diet, Nutrition and the Prevention of Chronic Diseases*. Geneva, Switzerland: World Health Organization, 2003 (WHO Technical Report Series, No. 916).
- <sup>2</sup> *National Institutes of Health. Clinical Guidelines on the Identification, Evaluation and Treatment of Overweight and Obesity in Adults*. NIH Publication No. 98-4083. Bethesda, MD: Department of Health and Human Services, National Institutes of Health, National Heart, Lung and Blood Institute, 1998.
- <sup>3</sup> *Rolls B and Barnett RA. The Volumetrics Weight-Control Plan: Feel Full on Fewer Calories*. New York: Quill, HarperCollins Publishers, 2000; HarperTorch, 2003.
- <sup>4</sup> *Rolls BJ and Bell EA. Dietary approaches to the treatment of obesity*. In: Jensen MD, ed. *Medical Clinics of North America*. Philadelphia: W.B. Saunders Company, 2000:401-418.

#### CLINICIAN-IN-PRACTICE VIEW

## 3 What Are the Best Dietary Approaches for Obesity Treatment?

*Donald D. Hensrud, M.D., M.P.H.*

Any dietary program used to treat obesity should be safe and nutritionally adequate, effective and practical and sustainable long-term.<sup>1</sup> When treating an obese patient, there are many different options for physicians to consider to reduce energy intake. At this point, no one dietary program has emerged as clearly more successful, which is why so many different options exist. For this reason the approach should be individualized for each patient.

Very-low calorie diets (VLCD),

which contain 800 kcal/day or less, are one option for doctors to consider. However, I do not use them in my practice because although VLCD are associated with faster initial weight loss, long-term results are no greater than more conservative treatment because of more rapid weight regain. Combining a VLCD with a behavioral program or pharmacotherapy has not led to better results.<sup>2</sup>

Meal replacements, a second option, contain 200-400 kcal/day and are nutritionally adequate. A

recent meta- and pooling analysis of six studies reported that meal replacements are slightly more effective than standard energy restricted diets.<sup>3</sup> Advantages of meal replacements include convenience, cost and that they are a specified number of calories. I use them in select patients within the context of an overall, ongoing program.

Low-carbohydrate diets, such as Atkins, are currently popular and appear to lead to greater weight loss over six months.<sup>4</sup> However, a long-term, randomized trial reported that

weight loss after one year was not significantly different from a calorie-controlled, low-fat diet.<sup>5</sup> In these studies, the dropout rate was approximately 40 percent among all groups, indicating long-term adherence to any dietary program is challenging. In addition, the types of foods consumed on low-carbohydrate diets are not always consistent with other evidence that suggests a diet high in plant products from vegetables, fruits and whole grains and low in saturated fat is optimal to prevent hypertension, cancer and hypercholesterolemia and coronary artery disease. My two main questions regarding low-carbohydrate diets are: Can people stay on them long-term? And if they can what are the long-term health risks? While studies to date haven't shown excessive morbidity from low-carbohydrate diets, case reports are accumulating and long-term health effects haven't been adequately evaluated.<sup>6</sup>

Another popular diet option for physicians and patients to consider is a low-fat diet. These lead to modest weight loss, but if the only focus is on fat and greater non-fat calories

### **It is important for doctors to help patients understand the common features of a dietary program that promotes weight loss and improved health**

are consumed, weight loss will not result. There is interest in a low-glycemic index diet to promote weight loss. At this point, however, there is only limited evidence of clinical effectiveness. There is some overlap among different programs. For example, a low-fat diet, a low-glycemic index diet and a low-energy dense diet may contain common features such as being high in fiber.

Short-term studies suggest that consuming low-energy dense foods can lead to lower energy intake and weight loss.<sup>7</sup> In addition, the types of foods consumed on a low-energy dense diet are consistent with other

dietary recommendations to maintain good health.

It is important for doctors to help patients understand the common features of a dietary program that promotes weight loss and improved health, including:

- A reduction in total caloric intake to a deficit of 500-1,000 kcal/ day.
- Generous amounts of fresh or frozen vegetables and fruits (not fruit juice or dried fruit that is higher in energy density),
- Moderate amounts of whole grain products,
- Lean sources of protein and
- Low intake of saturated fat, sugar and other refined carbohydrate.

Additionally, when fat is consumed, monounsaturated fats would be the best choice for cardiovascular health. Controlling portion size (except for vegetables and fruits), especially when eating in restaurants and snacking is necessary as these factors have been associated with increased energy intake.

It is challenging for physicians to address obesity and recommend dietary therapy with the limited amount of time available in a typical patient appointment. I try and perform a brief baseline assessment of diet, activity and behavioral habits to arrive at individualized dietary recommendations. A physician's role should be to provide motivation and general recommendations, then refer an obese patient to a Registered Dietitian for more detailed counseling.

Dietary recommendations should be practical. However, people often underestimate their ability to change

dietary habits. Old recipes should be modified and new ones incorporated. Process goals, which are specific, measurable and realistic should be utilized. Examples include eating one-half the usual portion of meat, eating one more serving of vegetables each day, or eating breakfast regularly. The evidence and my experience shows that patients who keep dietary records are more successful at weight management.

As a physician, I encourage my patients to approach a dietary program as a lifestyle change that will be sustainable, instead of 'going on a diet', which implies a temporary, negative and restrictive change in eating. Eating well, eating healthfully and reducing calories are not mutually exclusive when using creative strategies to apply the above suggestions. **EN**

#### **REFERENCES**

- <sup>1</sup> Weinsier RL, Wadden TA, Ritenbaugh C, Harrison GG, Johnson FS, Wilmore JH. Recommended therapeutic guidelines for professional weight control programs. *Am J Clin Nutr* 1984;40:865-72.
- <sup>2</sup> Mustajoki P, Pekkarinen T. Very low energy diets in the treatment of obesity. *Obes Rev* 2001;2:61-72.
- <sup>3</sup> Heymsfield SB, Van Mierlo CA, Van Der Knaap HC, et al. Weight management using a meal replacement strategy: meta and pooling analysis from six studies. *Int J Obes Relat Metab Disord* 2003;27:537-49.
- <sup>4</sup> Samaha FF, Iqbal N, Seshadri P, et al. A low-carbohydrate as compared with a low-fat diet in severe obesity. *N Engl J Med* 2003;348:2074-81.
- <sup>5</sup> Foster GD, Wyatt HR, Hill JO, et al. A randomized trial of a low-carbohydrate diet for obesity. *N Engl J Med* 2003;348:2082-90.
- <sup>6</sup> Stevens A, Robinson DP, Turpin J, Groshong T, Tobias JD. Sudden cardiac death of an adolescent during dieting. *South Med J* 2002;95:1047-9.
- <sup>7</sup> Rolls BJ, Bell EA. Dietary approaches to the treatment of obesity. *Med Clin North Am* 2000;2:401-18.



## Type 2 Diabetes and A1c

### What is Diabetes?

Diabetes is a disease caused by too little of the hormone insulin or poor use of the body's insulin. Insulin helps your body use and store glucose (sugar) that comes from food. If insulin levels are low or not working well, glucose builds up in your blood. This causes diabetes and can lead to many problems.

In type 1 diabetes, the body cannot make insulin. In type 2 diabetes, the body does not make enough insulin or use the insulin well enough to keep the body working well. Most people with diabetes have type 2 diabetes. Many don't know they have it.

Type 2 diabetes is most often caused by obesity.

### Complications of Type 2 Diabetes

People with diabetes are at risk for having serious problems (complications). If your blood sugar level stays too high for too long, complications begin and include:

- Blindness
- Kidney disease and failure
- Nerve damage and loss of toes/fingers/legs
- Heart attack, stroke and high blood pressure

Many people can control their disease with diet, exercise, and drugs, if needed. Five different types of diabetes drugs help to improve blood glucose levels for people with type 2 diabetes. Some

people with type 2 diabetes may have to take insulin shots so they get enough insulin. You will need to have your blood tested to learn how well you are controlling your disease. The test used to measure your control over time is the hemoglobin A1c test (A1c).

### What is the Difference Between Measuring Blood Glucose and A1c?

Testing for blood glucose daily tells the level of glucose in your blood at that moment. These levels change all day depending on what and when you eat, whether or not you exercise, and which drugs that you may be taking. A1c, however, tells information on your glucose control over the past 8–12 weeks.

### How Often Should My A1c Level Be Measured?

A1c is measured by a simple blood test performed in a laboratory. The American Diabetes Association recommends that you have your A1c measured four times a year. You can have the test less often if you are controlling your diabetes without drugs.

### Keep Your A1c as Low as You Can

People with diabetes should keep their A1c result at 7% (about 170 mg/dL or less). An average blood glucose for a person *without* diabetes is 4–6% (about 65 – 135 mg/dL).

If your A1c result is:	Then your daily average blood glucose is around: (in mg/dL)
12.0%.....	345
11.0%.....	310
10.0%.....	275
9.0%.....	240
8.0%.....	205

Target area for people with diabetes	
7.0% .....	170
6.0% .....	135
5.0% .....	100
4.0% .....	65

Source: Adapted from "About Diabetes" (<http://diabetes.about.com/library/blforms/blA1ccalc.htm>), which was adapted from *Diabetes Care* 25:275–278, 2002.

### What Should You Do With This Information?

The Hormone Foundation recommends that you talk with your doctor if you think you have diabetes. Share your medical and family history, so you can get the best treatment plan for you. The Hormone Foundation also recommends eating well, losing weight if needed, exercising, drinking less alcohol and not smoking.

### Other Resources

- American Association of Diabetes Educators: [www.diabetesnet.com](http://www.diabetesnet.com)
- American Diabetes Association: [www.diabetes.org](http://www.diabetes.org)
- Diabetes Action Research and Education Foundation: [www.diabetesaction.org](http://www.diabetesaction.org)
- Joslin Diabetes Center: [www.joslin.org](http://www.joslin.org)
- National Diabetes Information Clearinghouse (NIDDK/NIH): Phone: 1-800-860-8747; Web: [www.nidk.nih.gov/health/diabetes/ndic.htm](http://www.nidk.nih.gov/health/diabetes/ndic.htm)

#### EDITORS:

William L. Isley, MD  
Mark E. Molitch, MD  
Robert Alan Vigersky, MD

February 2004

For more information on how to find an endocrinologist, download free publications, or translate this fact sheet into other languages, visit [www.hormone.org](http://www.hormone.org) or call 1-800-HORMONE. The Hormone Foundation, the public education affiliate of The Endocrine Society ([www.endo-society.org](http://www.endo-society.org)), serves as a resource for the public by promoting the prevention, treatment, and cure of hormone-related conditions. The development of this fact sheet was supported by an unrestricted educational grant from Aventis and may be reproduced non-commercially by health care professionals to share with patients. Translation by MEDI-FLAG Corp.



THE HORMONE  
FOUNDATION

# LAS HORMONAS Y USTED

Página de información para pacientes

## La diabetes tipo 2 y la prueba A1c

### ¿Qué es la diabetes?

La diabetes es una enfermedad causada por una deficiencia de la hormona insulina o por el uso ineficaz de la insulina en el cuerpo. La insulina ayuda al cuerpo a utilizar y almacenar la glucosa (azúcar) que se ingiere a través de la comida. Si los niveles de insulina son demasiado bajos o no funcionan bien, la glucosa se acumula en la sangre. Esto es lo que causa la diabetes y puede ocasionar muchos problemas.

En la diabetes tipo 1, el cuerpo no puede fabricar insulina. En el tipo 2, el cuerpo no puede fabricar suficiente insulina o no puede utilizarla en forma eficaz para poder funcionar bien. La mayoría de diabéticos tienen diabetes tipo 2 y muchos de ellos no saben que la tienen. La causa más frecuente de la diabetes tipo 2 es la obesidad.

### Complicaciones de la diabetes tipo 2

La gente que tiene diabetes corre el riesgo de desarrollar varios problemas graves (complicaciones). Si su nivel de azúcar en la sangre continúa muy elevado por mucho tiempo, empiezan las complicaciones, entre las cuales se incluyen:

- La ceguera
- Enfermedad y fallo renal
- Daño neurológico y amputaciones de los dedos de las manos o pies, o de las piernas
- Ataques al corazón, derrames y presión alta

Muchos pueden controlar su enfermedad con dieta, ejercicio y medicamentos, si es necesario. Hay cinco tipos distintos de medicamentos para la diabetes que ayudan a mejorar los niveles de glucosa en la sangre en la gente que tiene diabetes tipo 2. Alguna gente con diabetes tipo 2 puede necesitar inyecciones de insulina para tener suficiente insulina. Usted tendrá que mandarse a examinar la sangre para determinar qué tan bien está controlando su enfermedad. La prueba que se usa para medir su control de la diabetes a través de un periodo de tiempo es un análisis de hemoglobina A1c (llamado A1c).

### ¿En qué difiere medir la glucosa en la sangre y la A1c?

El análisis de la glucosa en la sangre capta el nivel de la glucosa en la sangre a ese momento. Estos niveles pueden cambiar durante el día, dependiendo de factores como cuándo comió y qué, el nivel de actividad física y los medicamentos ingeridos. Por otra parte, la A1c da información sobre el grado de control de la glucosa durante el periodo anterior de 8 a 12 semanas.

### ¿Con qué frecuencia debo medir mis niveles de A1c?

La A1c se mide con un examen de sangre sencillo hecho en un laboratorio. La Asociación Americana de Diabetes (ADA) recomienda que usted se mida la A1c cuatro veces al año. Puede hacerse la prueba con menos

frecuencia si usted está controlando su diabetes sin medicamentos.

### Mantenga su A1c tan baja como sea posible

La gente con diabetes debe mantener su resultado A1c a un 7% (aproximadamente 170 mg/dL) o menos. El promedio de glucosa en la sangre para alguien que no tiene diabetes es de 4 a 6% (aproximadamente 65 – 135 mg/dL).

Si su resultado A1c es:	Su promedio diario de glucosa en la sangre es alrededor de: (en mg/dL)
12.0%.....	345
11.0%.....	310
10.0%.....	275
9.0%.....	240
8.0%.....	205

Objetivo para la gente con diabetes	
7.0% .....	170
6.0% .....	135
5.0% .....	100
4.0% .....	65

Origen: About Diabetes, <http://diabetes.about.com/library/blforms/blA1ccalc.htm>.  
Adaptado de: *Diabetes Care* 25:275-278, 2002.

### Otros recursos

Centro Nacional de Información sobre la Diabetes: <http://diabetes.niddk.nih.gov/spanish/index.asp>

Centros para el Control y la Prevención de Enfermedades (CDC): [www.cdc.gov/spanish/enfermedades/diabetes.htm](http://www.cdc.gov/spanish/enfermedades/diabetes.htm)

Healthfinder en Español:  
[www.healthfinder.gov/espanol](http://www.healthfinder.gov/espanol)

Programa Nacional para la Prevención de la Diabetes. Paso a Paso:  
[http://www.ndep.nih.gov/campaigns/PasoPaso/Paso\\_a\\_Paso.htm](http://www.ndep.nih.gov/campaigns/PasoPaso/Paso_a_Paso.htm)

#### EDITORES:

William L. Isley, MD  
Mark E. Molitch, MD  
Robert Alan Vigersky, MD

Febrero 2004

Para más información sobre cómo encontrar un endocrinólogo, obtener publicaciones de la Internet, o traducir esta hoja de datos a otros idiomas, visite a [www.hormone.org](http://www.hormone.org) o llame al 1-800-HORMONE (1-800-467-6663). La Fundación de Hormonas, la filial de enseñanza pública de la Sociedad de Endocrinología ([www.endo-society.org](http://www.endo-society.org)), sirve de recurso al público para promover la prevención, tratamiento y cura de condiciones hormonales. La creación de esta hoja de datos fue apoyada por una donación educacional de Aventis; la hoja puede ser reproducida para fines no comerciales por los profesionales médicos que deseen compartirla con sus pacientes. Traducción hecha por MEDI-FLAG Corp.

© La Fundación de Hormonas 2004



# Treating With Testosterone

## ENDOCRINE SOCIETY AUDIOCONFERENCE SPOTLIGHTS IOM REPORT, PRACTICAL APPROACH TO TESTOSTERONE THERAPY OF ELDERLY MEN

Is testosterone therapy safe for elderly men? Should you prescribe it? What is the level of serum testosterone that defines hypogonadism? What is the best assay for measuring testosterone? Experts in the area of testosterone therapy addressed these and other questions on December 17, 2003, when The Endocrine Society held an audioconference titled *Issues Concerning Testosterone Therapy of Elderly Men: The IOM Report and Other Implications*. The audioconference, which was hosted by Drs. Peter Snyder and Frances Hayes, two leading experts in this area, served as an informational follow-up to the report on the use of testosterone therapy in elderly men from the Institute of Medicine's (IOM) Committee on Testosterone and Aging.

The IOM report, which was released in November 2003, recommended short-term efficacy studies to further assess testosterone benefits in elderly men—a long-term risk study was judged premature due to the lack of well-established benefits. While experts noted that the long-awaited IOM report is helpful in

terms of research directions, it leaves the practicing physician in a quandary about how to approach the elderly hypogonadal man. The audioconference aimed to help members of the medical community determine what is known and not known about testosterone therapy for aging men and to attempt to formulate an approach to the elderly, hypogonadal man based on the existing evidence.

The audioconference began by establishing the scientific validity of age-related hypogonadism. A variety of studies document that total serum testosterone concentrations decrease gradually with age, with about 20 percent of men over age 60 having values below normal for young men.

Dr. Snyder raised an essential, but unanswered question about testosterone's decline with aging: "Is this fall a physiologic phenomenon, perhaps even conveying a benefit, or is it pathologic, causing harm," he questioned. His answer speculated about the pathologic cause, noting that one reason for thinking it might be pathologic are the variety of parallels, such as decreased bone densi-

ty and decreased muscle mass, between the consequences of frank hypogonadism due to either known pituitary or testicular disease and the consequences of aging.

### Potential Benefits of Testosterone Therapy

One way to attempt to determine if the age-related fall in testosterone is pathologic is to replace testosterone and see if parameters such as muscle strength and libido improve. To that end, audioconference participants listened to a review of 31 double-blind, placebo-controlled studies that examine the effect of testosterone therapy in elderly men on bone; body composition; muscle strength; physical function; cognitive function; mood; and sexual

function. Current scientific evidence suggests that testosterone therapy in elderly men is associated with improved body composition and possibly bone mineral density and sexual function, but not with any other clinical parameters.

During the audioconference, experts reviewed the results of clinical trials on testosterone therapy and discussed the studies' findings on areas of health in elderly men.

- **Body composition.** Twelve placebo-controlled trials have examined the impact of testosterone therapy on body composition measurements in older men and consistently demonstrated an increase in lean body mass and a decrease in body fat following testosterone administration.

- **Bone.** No data currently exists on fracture rates. However, the largest study to date on the effects of testosterone on bone in elderly men demonstrated that a subset of subjects who were "truly hypogonadal" (with testosterone levels of less than 300 ng/dL) experienced an increase of BMD at the lumbar spine. No change was seen at the hip, and there was no beneficial effect of testosterone compared with placebo overall. In another study, a low bioavailable testosterone level was used as the inclusion criterion. The study showed an increase in BMD at the femoral neck, but at no other site. "These data suggest there may be a threshold level of testosterone below which BMD is impaired, but above which further increases in testosterone confer no additional benefit," noted Dr. Hayes.

- **Cognitive function.** Two clinical trials showed no benefit in cognition and three showed a modest improvement in memory and spatial function but no other measure of cognition. Also, no studies to date have examined the impact of giving testosterone to men whose cognitive function is already impaired or who have overt dementia.

- **Mood.** Three out of eleven placebo-controlled trials on mood and testosterone administration in elderly men demonstrated a positive effect. Two of the three were in men with HIV infection, while the other study was in men with a history of depression that was refractory to standard antidepressant therapy, but showed a significant improvement with testosterone.

- **Muscle strength.** Eight out of ten placebo-controlled trials completed to date have found no difference between subjects treated with testosterone and those treated with a placebo. The two studies that demonstrated an

### MEASURING TESTOSTERONE: PRACTICAL TIPS

The audioconference offered the following steps and comments to the practicing physician as he or she attempts to diagnose hypogonadism in an elderly male:

- 1) Measure total testosterone as the first step in making the diagnosis of hypogonadism. In timing the blood sampling, remember that testosterone secretion occurs in a diurnal rhythm, with levels peaking in early morning and declining in the late afternoon and evening. Dr. Hayes suggests measuring an early morning sample, between 7 a.m. and 10 a.m. If the sample is low, repeat the test because there is potential for considerable variation in the testosterone levels.
- 2) Measure the free testosterone or bioavailable testosterone concentration in the setting of obesity, which lowers SHBG and thereby gives a total testosterone concentration that does not accurately reflect the free testosterone concentration. Free testosterone should be measured only by a laboratory that performs this assay by equilibrium dialysis. Bioavailable testosterone (that which is bound to albumin, from which it can freely disassociate, but not bound to SHBG) may be assessed by an assay that uses ammonium sulfate precipitation.
- 3) Measure LH and FSH if the testosterone concentration is low. If the LH and FSH are high, the patient has primary hypogonadism, and if not, secondary hypogonadism.
- 4) Perform an MRI of the sellar region and measure serum prolactin, T4, and early morning cortisol if the testosterone is unequivocally low (<200 ng/dL), and the LH is not elevated.
- 5) Offer the patient testosterone treatment if two or more testosterone levels are less than 200 ng/dL and the patient has symptoms consistent with androgen deficiency. Discuss the potential risks and benefits with the patient.

improvement were small—the first showed an improvement in grip strength and the second in arm and leg strength.

- **Physical function.** Of the five placebo-controlled studies completed to date, two have demonstrated a modest improvement in physical function and, in one of these studies, supraphysiologic doses of testosterone were used.

- **Sexual function.** In a recent study, men with predominantly age-related hypogonadism (defined as a testosterone level of less than 300 ng/dL) showed a significant improvement in libido, spontaneous erections and sexual activity when testosterone levels were increased to the mid-normal range. However, in most studies of healthy normal men, the correlation between testosterone levels and either libido or sexual activity is weak. Experts note that there is better correlation between sexual function and aging than there is between sexual function and levels of sex hormones.

The discrepancies between the various published studies on testosterone and the aging male are likely due to the small number of patients; the different inclusion criteria and definitions of hypogonadism; different study methodology; and use of different study endpoints.

### Potential Risks of Testosterone Therapy

There are potential risks of testosterone therapy in elderly men.

“The reason for thinking that the testosterone treatment of elderly hypogonadal men might have some risks is that certain diseases to which elderly men are prone are testosterone-dependent diseases,” Dr. Snyder explained. These diseases are:

- **Prostate cancer.** As many as 50 percent of men over age 50 may harbor occult prostate cancer.

- **Benign Prostatic Hyperplasia (BPH).** The testosterone dependency of BPH is illustrated by the mechanism of action of finasteride. This BPH treatment blocks conversion of testosterone to dihydrotestosterone, which is the

“The reason for thinking that the testosterone treatment of elderly hypogonadal men might have some risks is that certain diseases to which elderly men are prone are testosterone-dependent diseases”

principal androgen in the prostate, and thereby decreases prostate size and increases urine flow. Some experts are concerned that testosterone treatment of elderly hypogonadal men will make BPH worse.

- **Erythrocytosis.** The higher hemoglobin and hematocrit values in normal men than in normal women demonstrates that erythrocytosis is clearly testosterone-dependent. The dependency is also demonstrated by the fall in hemoglobin to anemic levels when men become hypogonadal and rise to normal when testosterone is replaced. Supraphysiologic doses of testosterone are known to cause erythrocytosis.

- **Sleep apnea.** The evidence for testosterone dependency of sleep apnea is less certain, but sufficient to concern experts.

Dr. Snyder noted during the audioconference that none of the risks of testosterone therapy have been proven in a clinical trial. The largest placebo-controlled, randomized, double-blind study of testosterone therapy in elderly men to date was designed to study efficacy, such as effects on bone and muscle, and was not nearly large enough to assess risk, he explained.

Experts note that assessing the risk of prostate cancer, which is one of the most publicized risks of testosterone therapy, in a clinical trial would be costly.

“According to one estimate, to determine if the risk of prostate cancer was increased by 30 percent, it would take a six-year study of approximately 6000 elderly men randomized to placebo or testosterone and would cost \$100 mil-

lion,” noted Dr. Snyder. “It was just such a study that the IOM committee evaluated and concluded was premature to perform now. As a consequence, it will be many years before we have factual information about risk.”

### Approaching the Elderly, Possibly Hypogonadal Male

Audioconference participants learned how to approach the diagnosis of hypogonadism in an elderly man. The diagnosis of hypogonadism is based on a screening, physical examination and laboratory evaluations.

A variety of questionnaires are available, all of which have a high sensitivity, but low specificity. A physical exam is often not very helpful in diagnosing age-related hypogonadism. However, a variety of signs, if present, such as reduced body hair or reduced muscle mass; gynecomastia; and abnormal testicular exam (size reduction or change in consistency) may be clues to the presence of hypogonadism. A physical exam may also be used to exclude causes of hypogonadism other than aging, such as a pituitary tumor or hemochromatosis.

When considering the different laboratory evaluations for measuring androgen fractions, the assay for total testosterone is considered by experts to be the best validated method for assessing androgen status. This test is also widely available to clinicians and is considered the gold standard for diagnosing hypogonadism, noted Dr. Hayes.

However, some endocrinologists argue that free testosterone levels are the most helpful to a clinician who is attempting to diagnosis hypogonadism in the aging male. Free testosterone is the testosterone that is neither bound to sex-hormone binding globulin (SHBG) or albumin, while total testosterone is the combination of bound and the free. Ninety-eight percent of testosterone in the circulation is bound to either albumin or SHBG.

“The argument [that free testosterone levels are best] is based on the fact that as you get older, there is an increase in SHBG levels and a related, disproportionately greater decrease in free compared to total testosterone levels,” Dr. Hayes explained.

One question that clinicians often ask is “why not measure free instead of total testosterone?” During the audioconference, Dr. Hayes explained some of the reasoning behind the measurement of total testosterone.

“Assays for free testosterone have been plagued by methodological difficulties and the most commonly used method is a commercially available kit that is notoriously unreliable and can underestimate free testosterone levels by as much as 100 percent,” she said. “The



most accurate method for assessing free testosterone requires use of equilibrium dialysis, a procedure which is time-consuming, expensive and generally only available in a few commercial laboratories.”

Audioconference participants were reminded that one of the challenges in the area of testosterone therapy is the absence of a solid consensus among endocrinologists as to what constitutes a low testosterone level. Dr. Hayes noted that her own arbitrary number for “truly hypogonadal levels” is “less than 200 [ng/dL].” She recommended that, after establishing a clear benefit in truly hypogonadal men, “subsequent studies can be done in men with levels in the low-normal range to determine if androgen supplementation can be helpful in this setting.”

### Treating the Hypogonadal Male with Testosterone

Some of the reasons that a physician would avoid treating a patient with testosterone therapy include a history of prostate cancer; abnormal digital rectal exam; elevated prostate-specific antigen (PSA) levels; history of breast cancer; severe congestive cardiac failure; and erythrocytosis, with a hematocrit level of greater than 50 percent.

Dr. Hayes and Dr. Snyder noted that once a patient begins testosterone therapy it is critical to monitor several areas. They explained some of the challenges that can affect specific methods of monitoring, which include:

#### ■ Time of blood sample draw.

The timing of obtaining blood samples for measuring serum concentrations depends on mode of delivery of testosterone. With intramuscular injections, the sample should be drawn midway between injections and should be in the middle of the normal range. With transdermal gels or patches, measure a testosterone level three to four hours after application and aim to maintain it

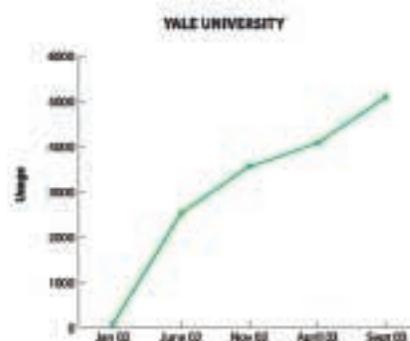
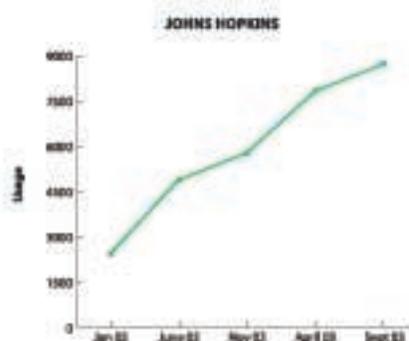
between 400-600 ng/dL (middle of normal range).

■ **PSA monitoring:** Levels of PSA should be checked at baseline, three, six and twelve months. A digital rectal exam should also be performed at three and twelve months. The key factors to PSA monitoring are: 1) rate of change in PSA; and 2) absolute PSA levels. If the PSA level increases by greater than 1.5 ng/mL per year, if the absolute PSA level exceeds 4 ng/mL, or if the patient develops symptoms of bladder outflow obstruction, referral to a urologist is indicated.

■ **Hematocrit levels.** Almost all studies of androgen therapy have demonstrated significant increases in hematocrit during testosterone therapy. The increase in hematocrit appears to be greater with intramuscular than with transdermal preparations. If the hematocrit exceeds 55 percent, and if testosterone levels are elevated, then the testosterone dose should be reduced to restore the hematocrit to the normal range. If the hematocrit is elevated and the testosterone levels are in the mid-normal range, there may be another cause of erythrocytosis. “It is important to look for other causes of erythrocytosis that have been unmasked by testosterone therapy; patients at increased risk of developing high hematocrit levels are those with chronic obstructive airway disease and those who live at high altitudes,” Dr. Hayes observed. If no other cause is found, phlebotomy may be needed.

The audioconference, *Issues Concerning Testosterone Therapy of Elderly Men: The IOM Report and Other Implications*, was organized by The Endocrine Society, with financial support through unrestricted grants from Columbia Laboratories, Esoterics Laboratories, LabCorp, and Solvay Pharmaceuticals. **EN**

# If a physician gave you medical advice, would you listen?



There's an interesting trend happening at some of the most noted institutions in the medical community—*UpToDate* is being used more and more by physicians seeking critical answers to their clinical questions. Maybe it's because they know that only *UpToDate* has nearly 3000 physician authors providing the most recent and relevant content in their particular area of expertise. Which allows you to receive balanced recommendations and actionable answers when you need them most. Available on CD-ROM and online, *UpToDate* is useful, usable and always current. But don't take our advice. Subscribe to *UpToDate* risk free with our 60 day money-back guarantee.

Putting clinical information into practice.

1-800-998-6374 • 1-781-237-4788 • [www.uptodate.com](http://www.uptodate.com)

OUTSIDE US AND CANADA



*UpToDate* is an official educational program of, or produced in cooperation with:



**AMERICAN COLLEGE  
OF RHEUMATOLOGY**  
EDUCATION • PRACTICE • RESEARCH



**ASN**  
SOCIETY OF NUTRITION



**SGIM**  
SOCIETY OF GENERAL  
INTERNAL MEDICINE



American Academy  
of Family Physicians

Recommended by:

\*A multi-specialty group practice in Massachusetts. ©2005 UpToDate, Inc.

## Fellow & Student Awards Call for Applications

The Student Affairs Committee is now accepting applications and nominations for the following four awards for fellows and students.

- The **Lilly Endocrine Scholars Award** is a clinical research fellowship awarded to an MD or MD/PhD fellow whose research is in pituitary disorders, bone disorders or diabetes mellitus. The fellowship provides \$47,000 per year for up to two years.
- The **Genentech Clinical Fellows Travel Grants** are awarded to U.S.-based clinical fellows to support their travel to ENDO 2004 in New Orleans.
- The **Pfizer Postgraduate Course Travel Grants** are awarded to five U.S.-based fellows to cover all costs associated with attending the May 2004 *Postgraduate Course on GH and Growth Factors—Metabolic Disorders* in Gothenburg, Sweden.
- The **Medical Student Achievement Award** is awarded to graduating medical school seniors in recognition of their exceptional ability and involvement in endocrinology. **EN**

For more information or an application for any of these awards, please visit <http://www.endo-society.org/students/awards.cfm> or contact Colleen Gorman at [cgorman@endo-society.org](mailto:cgorman@endo-society.org) or 301-951-2611.

## 2004 Society Awards Announced

The Endocrine Society's Awards Committee is pleased to announce the recipients of the 2004 Annual Awards. The 2004 award recipients are:

**Fred Conrad Koch Award**—the highest honor bestowed by The Endocrine Society in recognition of exceptional contributions to endocrinology.

*Patricia K. Donahoe*  
*Massachusetts General—Harvard Medical*

**Robert H. Williams Distinguished Leadership Award**—for recognition of outstanding leadership in fundamental or clinical endocrinology as exemplified by the recipient's contributions and those of his trainees and associates, to teaching, research, and administration.

*David M. de Kretser*  
*Monash Medical Centre*

**Edwin B. Astwood Award Lecture**—for outstanding research in endocrinology.

*Paolo Sassone-Corsi*  
*Institut de Génétique et de Biologie Moléculaire et Cellulaire*

**Clinical Investigator Award Lecture**—for an internationally recognized clinical investigator for major contributions to clinical research related to the pathogenesis, pathophysiology and therapy of endocrine disease.

*Shlomo Melmed*  
*Cedars-Sinai Medical Center*

**Sidney H. Ingbar Distinguished Service Award**—for distinguished service in the field of endocrinology.

*Margaret A. Shupnik*  
*University of Virginia Medical Center*

**Gerald D. Aurbach Award Lecture**—for outstanding contributions to research in endocrinology.

*David J. Mangelsdorf*  
*Howard Hughes Medical Institute*

**Distinguished Educator Award**—for exceptional achievement as an educator in the discipline of endocrinology and metabolism.

*E. Brad Thompson*  
*University of Texas Medical Branch*

**Distinguished Physician**—for outstanding contributions to the practice of clinical endocrinology.

*Edward S. Horton*  
*Joslin Diabetes Center*

**Roy O. Greep Award Lecture**—for outstanding contributions to research in endocrinology.

*Phyllis M. Wise*  
*University of California*

**Ernst Oppenheimer Award**—the premier award presented to a young investigator in recognition of meritorious accomplishment in the field of basic or clinical endocrinology.

*Ursula B. Kaiser*  
*Brigham-Women Hospital—Harvard Medical School*

**Richard E. Weitzman Memorial Award**—given to an exceptionally promising young clinical or basic investigator based on the contributions and achievements of the nominee's own independent scholarship performed after completion

## The Polls are Now Open for the 2004 Election!

The positions on the ballot are:

- President-Elect
- Council – Basic Scientist seat
- Council – At Large seats (2)

You are encouraged to vote on-line.

For instructions on how to obtain your ballot (paper or electronic) or how to cast your vote electronically, go to:

<http://www.endo-society.org/membersonly/committees/nominating/2004election.cfm>

Ballots will be accepted through March 26, 2004.



of formal training and shall be based on the entire body of these contributions, rather than a single work.

*Tso-Pang Yao  
Duke University*

All awards will be presented at ENDO 2004 in New Orleans, Louisiana in June. The Call for Nominations for the 2005 awards was announced in October 2003 with a submission deadline of January 30, 2004. **EN**

*For additional information contact  
Jeanie Dow at jdown@endo-society.org*

## Corporate Liaison Board Forum 2004

On Wednesday, June 16, 2003 at 6:30 p.m., join members of the Corporate Liaison Board (CLB) at the New Orleans Marriott as they host the fifth CLB Forum. This annual event will display cutting-edge topics as they pertain to obesity, which is the theme of The Endocrine Society's 86th annual meeting—ENDO 2004.

This symposium will emphasize the correlation among academic, industry and government/regulatory sectors, as they individually approach the common area of obesity. Accomplished speakers will reveal the latest developments, research and trends in obesity. **EN**

*For additional information, please contact Paris L. A. Moore, Manager, Development & Client Services at plmoore@endo-society.org*

## Minority Affairs

In October 2003, The Minority Affairs Committee (MAC) represented the Society at the 2003 Annual Biomedical Research Conference for Minority Students (ABRCMS) held in San Diego, CA. Committee members played an integral role in providing students with information on career, education and networking opportunities within the field of endocrinology and The En-



*CEU 2003 Minority Student Day Program—Patti Dinger, recruiter from Barry University, talks with students about preparing for college.*

doctrine Society. Dr. Sandra Murray, former member of MAC from the University of Pittsburgh, provided a presentation titled "Making the Best of a Scientific Meeting." Dr. Frank Talamantes, also a former member of MAC from the University of California, Santa Cruz, provided a presentation titled "Hormones and the Mammary Gland."

In addition, four students were selected to receive cash awards and certificates from the Society for posters featuring endocrine-related topics. This year's award winners are:

**Nicole C. Brown**, *Virginia Commonwealth University*

**Vashti Lachhman**, *Hunter College*

**Linda Oniah**, *The University of Alabama at Birmingham*

**Amutha Selvamani**, *Texas Women's University*

The Minority Affairs Committee hosted a Student Day program in October, at the Society's 2003 Clinical Endocrinology Update (CEU 2003) meeting. Sixty minority high school students enrolled in honors anatomy courses from two area high schools, American Senior High School and Doral Academy Charter High School, participated in a day long program designed to educate under represented students on the different educational and career opportunities in the field of endocrinology. Activities included a sci-

entific presentation, a tour of the exhibit hall and a college preparatory session where college recruiters, faculty, graduate and undergraduate students shared tips on planning for college. **EN**

*For additional information, please contact Veronica Parcan at vparcan@endo-society.org or Kirsta Suggs at ksuggs@endo-society.org*

## The Endocrine Society Provides Study Section Volunteer Names to the NIH

The NIH's Center for Scientific Review recently underwent a reorganization that in part affected the Endocrinology, Metabolism, Nutrition and Reproductive (EMNR) Sciences Integrated Review Group. Of concern to the Society was the potential fragmentation of endocrinology across the system, the maintenance and strengthening of endocrine-oriented study sections and ensuring that basic and clinical endocrine research is given fair peer review.

In an effort to maintain the importance of endocrine-related research at the NIH, The Endocrine Society recently submitted lists of more than 100 basic researchers and clinical researchers willing to volunteer as study section reviewers. The Society surveyed its members asking about their experience with the NIH's application review process in addition to their particular areas of interest. As a result the names of 96 basic researchers and 35 clinical researchers were submitted to the NIH. These first lists are also the foundation for a study section volunteer database that the Society will update regularly and use to submit new volunteer names to the NIH on a yearly basis. **EN**

*For additional information, please contact Susan Koppi, Director of Public Affairs at skoppi@endosociety.org*

# Patenting Life: Mighty OncoMouse Squeaks About the Ethics of Biopatents

LJ Deftos, M.D., J.D., L.L.M.  
Professor of Medicine  
University of California,  
San Diego and the San Diego VA Medical Center



*The Ethics Advisory Committee recognizes that members of The Endocrine Society are vitally interested in the moral, ethical and legal issues raised by the ongoing development of new biomaterials, including stem cell ownership and cloned organisms such as the now famous Dolly. The accompanying piece by Endocrine Society member Dr. Leonard J. Deftos addresses the complexity of biopatents in the international arena.*

Following a 17-year crawl through the maze of Canadian patent law, the Canadian Supreme Court recently rejected the patent for the Harvard Oncomouse, molecularly engineered to be cancer prone. In denying the patent, the Court ruled that Canadian law did not support the patenting of “higher life forms” like the mouse and other animals. The Canadian Court’s decision was in marked contrast to the granting of corresponding transgenic mouse patents in most industrialized countries, including the United States, France, Germany, Britain, and Japan.

Legal discourse in the U.S. regarding the patenting of “living

things” was initiated by the 1980 Supreme Court discussion in *Diamond v Chakrabarty* about a patent application for bacteria. In that case, Dr. Ananda Chakrabarty, a microbiologist for General Electric, filed a patent application for his invention of a genetically engineered bacteria capable of breaking down multiple components of crude oil, a capability possessed by no naturally occurring bacteria. Dr. Chakrabarty’s patent was denied by the patent examiner and by the Patent and Trademark Office (PTO) Board of Appeals, which reasoned that U.S. patent law did not cover “living things.” The Patent Appeals Court reversed the decision, boldly stating:

“...the fact that microorganisms are alive is a distinction without legal significance for patent law.” Patent Commissioner Diamond appealed to the Supreme Court, where Chief Justice Burger affirmed the patent and held: “a live, human-made microorganism is patentable subject matter...[The inventor’s] discovery is not nature’s handiwork, but his own.” The Court proclaimed that patents can issue to “...anything under the sun that is made by man.” Writing for the minority, Justice Brennan, disagreed with the award of the patent, reasoning that “it extends the patent system to cover living material even though Congress plainly has legislated in the belief that the [patent law] does not encompass living organisms. It is the role of Congress, not this Court, to broaden or narrow the reach of the patent laws. This is especially true where, as here, the composition sought to be patented uniquely implicates matters of public concern.”

Subsequent non-mammalian cases, deeming seeds (*In re Hibberd*) and oysters (*In re Allen*) as patentable subject matter, cracked open the

patent door for the Harvard mammal. Then, based on these decisions about non-mammals, the Patent Commissioner opened the door wide with a 1987 Rule that “The PTO now considers non-naturally occurring, non-human, multi-cellular living organisms, including animals, to be patentable subject matter...” And in April 1988, the PTO awarded the patent for the Harvard Oncomouse.

An Animal Legal Defense Fund (ALDF) challenge of the PTO Rule was dismissed on procedural rather than substantive grounds in a 1991 federal court holding that the ALDF, not being an injured animal or genetic researcher, had no standing to sue. And a heavily-lobbied Congress failed to pass a proposed moratorium on animal patents. So Chakrabarty’s basic holding on the patentability of life remains intact in the United States. The Harvard mouse was patented in Europe in 1992 and Japan in 1994. And patents have been granted for scores of transgenic animals in the United States and most developed countries.

In contrast to the United States and most developed countries, and despite generally similar patent laws, animals cannot be patented in Canada. The Canadian Supreme Court’s denial of the Harvard mouse patent application followed years of deliberation by Canadian courts about whether or not “higher life forms,” such as mice and men, should be patented. The Canadian patent application for the Harvard Oncomouse, genetically-engineered with the cancer-promoting myc oncogene, was filed in June 1985; it crept through a patent labyrinth of arguments for and against life patents, the former primarily commercial and for exploiting invention, the latter primarily ethical and against the commodification of life. The patent on the mouse by the Canadian Patent Office was initially rejected, on the grounds that it was made “primari-

ly by nature.” This decision was reversed by a Federal appeals court in August 2000. Because of the magnitude of the implications of the decision, and in accord with recommendations from its Bio-technical Advisory Committee, the Canadian Patent Commissioner appealed the Harvard patent award to its Supreme Court and request-

cized as biocolonialism and biopiracy. Perhaps the recent Canadian decision will reignite enlightening discourse and “public dialogue” on animal patents that will include moral arguments about life patents. Although such arguments are not provided for by either U.S. or Canadian patent law, they are by the “morality” clause of European

### In contrast to the United States and most developed countries, and despite generally similar patent laws, animals cannot be patented in Canada.

ed a “public dialogue” about animal patents. Finally, in a 5-4 decision the patent was rejected.

The Canadian Supreme Court decision has resurrected arguments against animal patents—that they start the slippery slide to patenting humans. Ironically, in the United States, although the courts make no distinction between lower and higher life forms, human patents are proscribed. In contrast, the Canadian Supreme Court does acknowledge a distinction between lower and higher life forms, yet Canada has no express ban on patenting humans. The European Union prohibits patents on “the human body,” but allows patents on “an isolated element of a human body.” Further reflecting unsettled international biopatent law, human cloning is unlawful in the United Kingdom, but patents do cover the cloning and growing of a human embryo.

The recent biopatent debate in the U.S. has focused more on gene patents and cloning, rather than genetically altered animals. While such animal patents have been widely allowed for decades in some countries, opposition to them still clearly exists. In some undeveloped countries, patents on all “living things” have been strongly criti-

patent law, which does allow balancing a patent’s harm and benefit, here to cancer-prone animals and cancer-affected humans. While the Canadian Supreme Court in its decision directly addressed the issue of patenting animals, the Harvard mammal was patented in the U.S. with precedent-setting judicial review of only patents on bacteria, oysters, and seeds. Will the sound of the myc mouse widely resonate through the public polemic about both biopatents and spill over to the ongoing bioethical debate about human cloning and stem cells, or will it just remain a squeak? **EN**

*For additional information regarding the Ethics Advisory Committee, please contact Jeanie Dow at [jdow@endo-society.org](mailto:jdow@endo-society.org)*

#### LEGAL REFERENCES:

- <sup>1</sup> *Diamond v. Chakrabarty* 447 United States 303 (1980)
- <sup>2</sup> *President and Fellows of Harvard College v. Canada Commissioner of Patents* (1998)

#### BACKGROUND REFERENCE:

- <sup>1</sup> *Morin E. Of mice and men: the ethics of patenting animals. Health Law J. 1997; 5:147-163*

## CPT Coding Changes for 2004: CPT Category I, II and III

*Richard A Dickey, MD, FACP, FACE*

*CPT and RUC advisor; member AMA Practice Expense Advisory Committee;  
Chair, Clinical Affairs Committee*

Once again the yearly cycle of additions, deletions and revisions in the coding sets for physician and other healthcare professionals is at hand. Several updated references available will provide further information on the new coding sets to the reader and coding assistants. This edition of the Coding corner will discuss the changes in the Current Procedural Terminology (CPT) codes. A future edition of Coding Corner will describe pertinent changes in the ICD-9-CM diagnosis codes set and the HCPCS level II codes. The former HCPCS level III codes, or national codes, are being phased out now and should be used no longer.

The CPT code set now includes the familiar CPT codes, now called Category I codes, a growing list of new codes, called Category II, for tracking performance measures, and a set of Category III codes for emerging technology. Pertinent CPT code changes for endocrinology include additions, deletions and revisions in codes. The Category I code changes for 2004 are primarily revisions in nomenclature and quali-

population and codes where physician work values were already part of the valuation of the codes (i.e. 36400; 36405; 36406; 36410). These codes are distinguished from those for routine collection of specimens not requiring a physician's skill, i.e. 36415 & 36416.

CPT codes 10021 and 10022 for fine needle aspiration biopsy of the thyroid are unchanged but a note under code 60100, percutaneous core needle biopsy of the thyroid, now directs one to the 10021 and 10022 codes if the procedure is FNA rather than core biopsy. This should help prevent the common, inadvertent but erroneous use of code 60100 for FNA procedures.

The nuclear medicine diagnostic code 78020 for thyroid carcinoma metastases uptake is to be listed separately in addition to the code for the primary procedure and in conjunction with code 78018 (thyroid carcinoma metastases imaging



*Richard A Dickey,  
MD, FACP, FACE*

commonly used organ or disease oriented panels (see 80050 & 80055), the chemistry codes (see 83716; 84155; 84160; & 84165), and the reproductive medicine procedures codes (see 89250; 89251 & 89258). New additions to the CPT codes in the pathology and laboratory sections include codes for total protein (see 84156 & 84157), cytopathology codes (see 88112), surgical pathology codes (see 88361), other procedures (see 89235 & 89240) and a long list of new reproductive medicine procedures (see codes 89268-89356).

Evaluation and management code changes include inpatient pediatric and neonatal critical care code revisions to codes 99293, 99294, 99295 & 99296). The changes are focused on the age of the patient, the site of the critical care services and the proper use of these versus the hourly 99291 and 99292 critical

### Category II codes are new and numeric-alpha, ending in the letter F.

fiers for codes. CPT codes for vascular injection procedures (36000 ff.) and venous sampling/venipuncture were reviewed and revisions made to reflect the requirement that a physician's skill is required to perform the procedure after repeated failed attempts by non-physicians. This affects sampling from the pediatric

whole body) only. This makes 78020 an add-on code, a concept which also appears in the evaluation and management section codes. This add-on concept restricts the use and value attributed to these add-on code services.

The pathology and laboratory codes include many revisions in the

care codes, which have no age specification. Finally, as alluded to above, several evaluation and management codes are clearly defined as add-on codes, i.e. 99290, 99292, and the prolonged physician service codes 99354-99359.

Category II codes are new and numeric-alpha, ending in the letter

F. They express performance measures. Use of these codes is optional and they are not a substitute for the Category I codes. The include: 0001F Blood Pressure measured; 0002F Tobacco use, smoking assessed; 0006F Statin therapy, prescribed; 0008F ACE inhibitor therapy, prescribed; & 0011F Oral antiplatelet therapy, prescribed (e.g. aspirin, clopidogrel/Plavix, or a combination of aspirin and dipyridamole/Aggrenox).

Category III codes are numeric-alpha codes but end in T. Category III code changes for 2004 include seventeen additions and two deletions, which were converted to Category I CPT codes. Pertinent to endocrinology and reproductive medicine are new cryopreservation codes for reproductive tissue, ovari-

an (code 0058T) and cryopreservation of oocyte(s) code 0059T.

Look for the pertinent changes for 2004 in the diagnosis code set ICD-9-CM and the HCPCS level II codes in the next edition of this column. **EN**

*For additional information please send your inquiries or suggestions to Susan Koppi at 301-941-0252 or email [skoppi@endo-society.org](mailto:skoppi@endo-society.org)*

#### REFERENCES:

Current Procedural Terminology, CPT 2004. Available from the AMA or other licensees. AMA order phone number is (800) 621-8335. Discount for AMA member.

cpt changes: An Insider's View. Available from the AMA. AMA order phone number is (800) 621-8335. Discount for AMA member.

CPT Assistant. A quarterly publication available by subscription from the AMA. Articles explain in detail complex coding issues. Citations of these articles are provided in Current Procedural Terminology, CPT 2004.

HCPCS Level II Codes 2004. Available from the AMA (discount for AMA member) or other suppliers.

International Classification of Diseases ICD-9-CM 2004. Available from the AMA (discount for AMA member) or other suppliers.

#CPT is a trademark of the American Medical Association. All Current Procedural Terminology (CPT) five-digit numeric codes, descriptions, numeric modifiers, instructions, guidelines, and other material are Copyright 2003 American Medical Association. All Rights Reserved.

## SPOTLIGHT ON ANIMAL RESEARCH

### Endocrinologists Surveyed on Animal Research

Earlier this year, 611 randomly selected basic and clinical research members of the Society responded to a survey on animal research. The purpose of the questionnaire was to gain a better understanding of how animal research regulation and activity impacts the work of endocrinologists. The Society's Research Affairs Committee (RAC) intends to use the survey data to guide future efforts provide recommendations to the Government Relations Committee (GRC) regarding legislative and regulatory activity.

The survey indicates that: more than 80 percent of respondents currently conduct research utilizing animals. Seventy-five percent classified themselves as basic researchers. Rodents were by far the most commonly used, with mice accounting for nearly 60 percent and rats more than 40 percent.

Respondents were also asked to provide general comments about the state of animal research regulation and legislation. The most common concern voiced was about the onerous paperwork required for using animals. Many respondents also pointed out that even the smallest change to their use of already approved animals required unreasonable amounts of applications, reviews and approvals.

As the RAC prepares its activity agenda for 2004, animal research will remain strong area of interest. The RAC will continue to track activity and take appropriate action on issues of concern. Members are encouraged to voice concerns regarding their use of animals in research and provide suggestions about the best course of action. **EN**



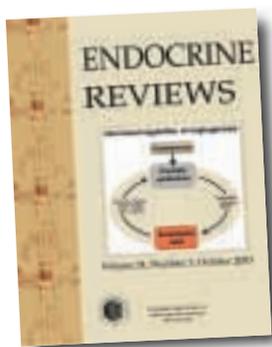
## Call for Nominations and Applications for Editor-in-Chief of *Endocrine Reviews* Due February 23, 2004

Dr. E. Brad Thompson will complete his five-year term as the Editor-in-Chief of *Endocrine Reviews* on December 31, 2005, having provided exceptional organizational skills, leadership and dedicated stewardship over the journal.

The Endocrine Society seeks nominations and applications for the position of Editor-in-Chief of *Endocrine Reviews* from members of the Society. The new EIC will formally assume responsibility on January 1, 2006, but must be available to work with Dr. Thompson to prepare joint review solicitations beginning in January 2005 and be set up to assume unsolicited review duties by October 2005. The official term will end December 31, 2010, but the EIC must be available, during the editorial office's phase out operations, until January 31, 2011.

Applicants should be dynamic, nationally recognized endocrinologists willing to devote a significant portion of their time to journal affairs. They should maintain and enhance *Endocrine Reviews'* reputation for providing a mix of basic, transitional and clinically relevant articles and lead the journal to achieve outcomes consistent with The Endocrine Society Strategic Plan.

*Endocrine Reviews* is The Endocrine Society's most highly cited journal, with an Impact Factor of 21.643, ranking it 1st among endocrinology journals in the ISI's 2002 Science Citation Index and 19th among 5,876 scientific journals surveyed.



The new EIC will work with a managing editor located in the centralized editorial office at the Chevy Chase, MD, office of The Endocrine Society. The EIC will maintain an office and one administrative editorial assistant at his/her institution. The EIC receives administrative support from The Endocrine Society Office, particularly the Senior Director of Journal Publications, who manages all of the publishing business activities of the journal, and the Senior Director of Business Operations, who oversees the administration of the budget of the journal.

There are several differences between *Endocrine Reviews* and the other Society journals. Review articles are lengthy and pedagogical; the page allocation for *Endocrine Reviews* is lower; and the publication schedule less frequent. The first difference is significant in terms of the amount of work involved relative to the material published. Moving a review article from proposal to publication is an intensive process taking anywhere from six months to three years and involving multiple revisions and reviews. Although review articles are a vital part of scientific literature, researchers by necessity give precedence to activities requiring immediate attention, such as grant writing, conducting and publishing original research, teaching and clinical practice. The EIC should be prepared to deal with this inherent challenge and committed to advancing the field of endocrinology by promoting review articles that introduce new advances in other fields to endocrinologists.

The EIC is responsible for the content and direction of the journal, subject only to the approval of the Publications Committee and Council. During the past 12 months, *En-*

*dochrine Reviews* received 37 manuscripts for review, 20 of which were basic and 17 of which were clinical. Of the manuscripts received, 19 were solicited and 18 were unsolicited. *Endocrine Reviews* publishes 800 pages annually. The current EIC is assisted by four associate editors, an advisory board of two and an editorial board of 17. The EIC develops and manages the editorial board, and provides regular reports on journal and editorial activities to The Endocrine Society Publications Committee, of which he/she is an ad hoc member. The EIC is also a voting member of the Journals Steering Committee, and is required to attend three yearly meetings of the Publications and Journal Steering Committees. An additional responsibility of the EIC of *Endocrine Reviews* is overseeing the publication of *Recent Progress in Hormone Research*, which since 2001, has consisted of solicited papers based on the theme of the previous year's Annual Meeting of The Endocrine Society. The *RPHR* Editor, appointed by the EIC of *Endocrine Reviews*, is directly responsible for this publication.

Applications must be submitted by February 23, 2004. Nominations must be submitted in time for the search subcommittee to solicit the application from the appropriate nominees by this date. The selection process for the EIC begins with the Publications Committee's review of all applicants/nominees at its March 13, 2004, meeting. Selected candidates will be contacted after the meeting by the search subcommittee chair and asked to provide more details about proposed associate editors, goals and new initiatives for the journal and a draft budget for the EIC and his/her assistant. (The *Continues on page 25.*

## Keeping you informed about endocrinology in the news

*Almost everyday, new developments in endocrinology are featured in the news. In each issue of Endocrine News, Endocrine Edge will highlight some of the recent news stories.*

### Diabetes

In recent years, studies nationwide have shown that children are at greater risk for type 2 diabetes, a disease normally found in adults. The American Academy of Pediatrics released a clinical report in October 2003 which strongly recommended screening children, especially Alaska Natives and American Indians, for type 2 diabetes. **EN**

For more information visit <http://www.aap.org/>

### Prostate Cancer Screening

A study published in the December issue of the *Journal of the National Cancer Institute*, questioned the value of Prostate-Specific Antigen (PSA) tests. These tests are currently conducted on almost one-third of men over the age of 75. **EN**

For more information visit <http://www.cancer.gov/cancerinfo>

### Obesity

The U.S. Preventive Services Task Force recently released recommendations to help the epidemic of obesity

in the United States. The government advisory group urged, for the first time, that doctors weigh and measure all adults and also recommended intensive counseling and behavior treatment for those found to be obese. **EN**

For more information visit <http://www.hhs.gov/policies/index.shtml>

### Testosterone Therapy

In November, a panel of the Institute of Medicine released a report on testosterone therapy in aging men. The panel found that testosterone therapy in aging men is an unproven, yet growing practice that needs closer study to establish its benefits and risks. **EN**

For more information visit <http://www.iom.edu/project.asp?id=486>

### Call for Nominations

*Continues from page 24.*

Endocrine Society Finance and Publications Directors will prepare the centralized editorial office budget in consultation with the new EIC). The Publications Committee will interview finalists in person at its September 11, 2004, meeting and choose an EIC to recommend to The Endocrine Society Council.

The applicant must submit a full CV and include the following information in not more than three single-spaced typed pages:

- A brief description of his/her qualifications.
- A short statement outlining the approach that will be taken to editing the journal, including goals for content, target readership, review acceptance criteria and editorial policy.

- The desired number of associate editors, how meetings of the editorial board will be convened, and how editorial decisions will be made. He/she need not designate all of the associate editors, but rather suggest a sufficient number of specific individuals, with an appropriate distribution of skills, to allow the committee a sense of the composition of the group that will be responsible for journal content.

- A discussion of the present status of the journal, opportunities for growth and enhancement and plans to achieve these goals.

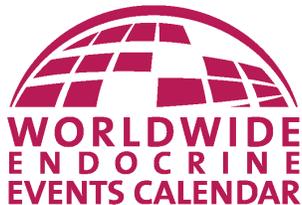
Please send letter of application/or nomination to arrive no later than February 23, 2004, to Dr. Fred Schaufele, Chair of the *Endocrine Reviews* EIC Search Subcommittee of the Publications Committee. Nominators of individuals should provide a brief description of the candidate's

qualifications for the position. The Committee requires all curricula vitae and letters of application must be submitted as PDF attachments.

### Fred J. Schaufele, Ph.D.

Univ of California San Francisco  
Dept of Med/Metabolic Res Unit  
513 Parnassus Avenue-HSW 1119  
San Francisco, CA 94143-0540  
Email: [freds@diabetes.ucsf.edu](mailto:freds@diabetes.ucsf.edu) **EN**

*Individuals with questions regarding this position may contact Dr. Schaufele at (415) 476-7086, email: [freds@diabetes.ucsf.edu](mailto:freds@diabetes.ucsf.edu); Dr. Agi Schonbrunn, Ph.D., Chair of the Publications Committee, at (713) 500-7470, email: [Agnes.Schonbrunn@uth.tmc.edu](mailto:Agnes.Schonbrunn@uth.tmc.edu); Dr. Thompson, current EIC of EDRV at (409) 772-2271, email: [endoreviews@endo-society.org](mailto:endoreviews@endo-society.org); Senior Director of Publications, Lenne P. Miller, at (301) 941-0235, email: [lmiller@endo-society.org](mailto:lmiller@endo-society.org)*



MARCH

March 3–6, 2004: 44th Annual Conference on Cardiovascular Disease Epidemiology and Prevention featuring the L. J. Filer Symposium on Prevention of Overweight and its Consequences Beginning in Youth, San Francisco, CA. For more information please visit <http://www.americanheart.org> or email [scientificconferences@heart.org](mailto:scientificconferences@heart.org)

March 4–10, 2004: Molecular Control of Adipogenesis and Obesity, Keystone, CO. For more information please visit <http://keystonesymposia.org> call 970 262-1230 or email [info@keystonesymposia.org](mailto:info@keystonesymposia.org)

March 7–10, 2004: Perioperative Management—In Its 20th Year, Marco Island, FL. For more information please visit <http://www.hopkinscme.org/cme> call 410 955-2959 or email [cmenet@jhmi.edu](mailto:cmenet@jhmi.edu)

March 18–20, 2004: Joint International Symposium on Calcitonin Gene-Related Peptide, Amylin and Calcitonin 4th Symposium on Adrenomedullin and Proadrenomedullin N-20 Peptide, Zurich, Switzerland. For more information please visit <http://www.symposium2004.ch> or contact Prof. Dr. Med. J.A. Fischer at ++41-1-386-16-51 or email [fischerj@balgrist.unizh.ch](mailto:fischerj@balgrist.unizh.ch)

March 21–25, 2004: Society of Toxicology 43rd Annual Meeting, Baltimore, MD. For more information please visit <http://www.eshow2000.com/toxexpo/toxwelcome.cfm>

March 21–23, 2004: IASO Stock Conference, Santo Domingo, Dominican Republic. For more information please visit <http://www.iaso.org/STOCK/2004.htm>

March 22–24, 2004: 23rd Joint Meeting of the British Endocrine Societies, Brighton, United Kingdom. For more information please visit <http://www.endocrinology.org> call +44 (0) 1454 642210 or email [conferences@endocrinology.org](mailto:conferences@endocrinology.org)

March 24–27, 2004: 2004 American Society for Clinical Pharmacology and Therapeutics (ASCPT) Annual Meeting, Miami Beach, FL. For more information please visit <http://ascpt.org> call 703 836-6981 or email [info@ascpt.org](mailto:info@ascpt.org)

March 25–27, 2004: Preparation for ABIM Recertification in Internal Medicine, Washington, DC. For more information please visit <http://www.acponline.org/cme/courses.htm>

March 26–28, 2004: 4th Asian & Oceanic Congress of Andrology, Penang, Malaysia. For more information please email [Aaoca@meditech.com.my](mailto:Aaoca@meditech.com.my)

March 26–28, 2004: The Eastern Society for Pediatric Research (ESPR) Annual Meeting, Old Greenwich, CT. For more information please visit <http://www.aps-spr.org/> or contact Rashmin C. Savani by phone 215-590-5507 or email [Rsavani@mail.med.upenn.edu](mailto:Rsavani@mail.med.upenn.edu)

March 27–31, 2004: 95th Annual Meeting of the American Association for Cancer Research, Orlando, FL. For more information please contact <http://www.aacr.org/2004am/2004am.asp>

March 28, 2004: ABIM SEP-Based Learning Sessions for Recertification GIM Module00-B, 01-2, Washington, DC. For more information please visit <http://www.acponline.org/cme/courses.htm>

March 29–April 3, 2004: AIMM/ASBMR John Haddad Young Investigators' Meeting, Snowmass, CO. For more information please visit <http://www.cor.uams.edu/aimm/invite.htm>

March 30, 2004: ASO Conference on "Diabetes," London, United Kingdom. For more information please visit <http://www.aso.org.uk> or contact C. Hawkins by email at [chris@aso.ndo.uk](mailto:chris@aso.ndo.uk) **EN**

## ENS Preceptor Program

The Endocrine Nurses Society (ENS) proudly announces the development of the Endocrine Nurses Society's Preceptor Program. There are many nurses new to the field of endocrinology that have expressed a desire to learn the necessary skills to become competent in adult endocrine nursing. For this reason, the Education Committee of ENS has developed the Preceptor Program. All participants in the program must be members of ENS.

Fellow nurses, physicians, colleagues, and/or pharmaceutical representatives will identify a nurse new to the specialty. The new nurse (Preceptee) will be invited to visit the experienced nurse's (Preceptor) site for 1 to 2 days. This visit will enable the Preceptor to orient the new nurse to an endocrine specialty, nursing care specific to the adult endocrine patient, teaching specific to this patient population, and long-term management of patients. The Preceptor Program was developed as *an observational and informational tool* to provide accurate and comprehensive clinical information to a nurse new to the field of endocrinology. **This visit is observational only. EN**

For more information or applications, please visit our Web site [www.endo-nurses.org](http://www.endo-nurses.org) or contact Karen J.P. Liebert, RN by email [Pulaski@helix.mgh.harvard.edu](mailto:Pulaski@helix.mgh.harvard.edu) or phone 617-726-7473 or Teresa Kidder Moore, RN by email [tkm820@aol.com](mailto:tkm820@aol.com) or phone 212-263-4172.

### Worldwide Endocrine Events Calendar

Your online resource for endocrinology meetings around the globe. Search by sponsoring organization, date, topic, location, and beyond. Post your event on the calendar or search the database.

[www.endo-society.org](http://www.endo-society.org)



# Free Patient Information at Your Fingertips

Did you know The Hormone Foundation offers free educational materials for you to provide to your patients? Simply go to [www.hormone.org](http://www.hormone.org) and click on Publications. There you will find valuable resources on a variety of hormone-related conditions. All ready for you to download, print and distribute to patients.

**Visit [www.hormone.org](http://www.hormone.org) for these and other informative patient materials:**

- Hormone Therapy for Menopausal Symptoms: The First Few Years
- Patient's Guide to Low Testosterone
- Menopause Management: In Light of the Women's Health Initiative Study
- Get the Facts: Growth Hormone Issues in Children and Adults
- Menopause: Managing Your Body's Changes (Spanish and English)
- What Is An Endocrinologist?
- Get the Facts: Hormones and Breast Cancer
- Pros and Cons for Treatment of Menopause Symptoms
- Evolution of Estrogen (Timeline)
- Recognition and Treatment of Pituitary Hormone Imbalances (Webcast)
- Caring With Confidence: Influence of Hormones in Women's Lives

*Some materials may be available in print form.*

**For more information, please contact The Hormone Foundation at 1-800-HORMONE  
or email [hormone@endo-society.org](mailto:hormone@endo-society.org)**



THE HORMONE FOUNDATION

The Hormone Foundation, the public education affiliate of The Endocrine Society, is dedicated to serving as a resource for the public by promoting the prevention, treatment and cure of hormone-related conditions.



# INTERNATIONAL ENDOCRINE RESOURCES

---

AVAILABLE ON THE ENDOCRINE  
SOCIETY WEB SITE!

You're just a click away from:

- Links to international endocrine societies and organizations
- International events and meetings in the Worldwide Endocrine Events Calendar

*Find these online tools on  
The Endocrine Society portal at  
[www.endo-society.org/international.cfm](http://www.endo-society.org/international.cfm)*



8401 Connecticut Ave., Suite 900  
Chevy Chase, MD 20815

*[www.endo-society.org](http://www.endo-society.org)*