# Nutrition SPOTLight

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Volume 3 Issue 1



# Men's Health—A Little Attention May Add Quality Years

Remember when it took real effort to convince that man you know...brother, father, husband, even son...that he ought to make (and keep) an appointment with his doctor? Seem like only yesterday? Or, this morning? Chances are, it was. Men visit their physicians less often than women, and tend to wait longer before having problems treated. What these facts suggest is that men don't pay attention to, or take care of, their health as well as women. though needs of both sexes are not so different.

Here are facts behind men's health:
\*cardiovascular disease is a leading cause of death;
\*high blood pressure and high cholesterol levels affect cardiovascular health;
\*diabetes incidence is on the rise--

\*diabetes incidence is on the risemany don't realize they have the condition;

\*an enlarged prostate (BPH) will affect more than 50% of all men after 60 years of age; \*early prostate cancer has no

\*early prostate cancer has no symptoms and often goes undetected.

This issue of Nutrition Spotlight focuses on men's health issues--particularly the role nutrition plays in those concerns. We address andropause, the age-related decline in testosterone. Included is up-to-the- minute research on sperm health

and diet's role in men's reproductive health. This issue features an article about the role of diet in maintaining prostate health. We look at foodborne illness from angles of interest to men. Our easy recipe is for 'delicious yet healthy' spiced pork chops featuring a tomato-rich saucesee page 7 for how tomato products may positively affect prostate health.

This issue includes an interview with Dr. Mark Haub, whose research focuses on health and exercise issues at Kansas State University. In response to your feedback, we have summarized the results of the Nutrition Spotlight survey.

Finally, we have included numerous web sites addressing men's health and wellbeing throughout the issue. Look for boxes containing related web sites on most pages. To begin the list, here is an educational, entertaining site: http://mens.healthsite.com.au/tuneup/ It discusses men's health in automotive terminology, to help "drive the point home."

Whatever your role in men's health--advisor, educator or owner--we hope you find this issue of Nutrition Spotlight informative and helpful.

Reference: Men's Health Tune-Up at http://mens.healthsite.com.au/tuneup. 4/17/01

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Kansas State University Agricultural Experiment Station and Cooperative Extension Service

### **Andropause**

Age-related decline in testosterone is called andropause. Recognized as a medical condition for over 50 years, study of andropause has increased because men are living longer, increasing the incidence of andropause. In fact, specialists now realize that in addition to decreases in male hormones, also known as androgens, other hormones such as growth hormone decrease, giving rise to the term, androgen decline in the aging male or ADAM.

**Symptoms**. Just as menopausal symptoms vary in onset, intensity, and variety for women, andropausal symptoms are highly individual. Some common symptoms are weakness, fatigue, loss of motivation, depression, insomnia, anxiety, irritability, mood swings, problems concentrating, and lack of interest in sex. Physical concerns include an increased risk of osteoporosis and cardiovascular disease. Declining testosterone results in more upper and central body fat, adding to the risk for cardiovascular disease. Osteoporosis occurs in one of eight men over the age of 50. The lifestyle and dietary changes directed toward women to ward off osteoporosis need to be adopted by men as well because fractures related to osteoporosis are increasing in men. Anemia is more likely to occur because the positive effect of testosterone on red blood cell production may not be present. The most frequent age at which symptoms first appear is 51 to 60 years. Smoking more than ten cigarettes a day is associated with symptom onset before age 50.

**Treatment.** Testosterone treatment is highly controversial because some doctors have shown benefits, while others say that good clinical studies have not been conducted and increased risk of prostate cancer argues against testosterone use. Men with symptoms of ADAM need to be assessed by informed medical personnel. Men shouldn't assume that being depressed or tired is part of aging, nor should they ignore a condition associated with osteoporosis, cardiovascular disease, or anemia.

Sources Bain J. 2001. Can Fam Physician 47:91-97. Burns-Cox N, Gingell C. 1997. Postgrad Med J. 73:553-556. Morales A, Heaton JP, Carson CC. 2000 J Urol. 163:705-712. Sternbach H. 1998. Am J Psychiatry. 155:1310-8. Tan RS, Philip PS. 1999. Arch Androl. 43:227-33. www.andropause.com

# http://www.menshealth.com/food\_nutrition/tasty01.shtml

Men's Health magazine, a guide to food, nutrition and recipes

### www.fathersworld.com/recipes/dadscookin/index.html

Recipes and tools for dads and kids cooking together

# http://www.nal.usda.gov/fnic/etext/000054.html

USDA Food and Nutrition Information Center

# http://www.ianr.unl.edu/pubs/foods/g1194.htm

University of Nebraska- Lincoln-Nutrition Guide for Men

# http://www.wvhealth.wvu.edu./clinical/menshealth/index.htm

West Virginia's University Healthcare guidelines for men.

# http://www.health.harvard.edu/aboutmens.shtml

Harvard Men's Health Watch

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# Spotlight on K-State's Human Nutrition (HN) faculty: An interview with Dr. Mark Haub, Assistant Professor

Exercise and diet go together, like football on Monday nights. For Dr. Mark Haub, exercise and diet certainly go together, since both are his specialties — in his teaching and also as his area of research interest.

The newest member of the Department of Human Nutrition, Haub came to K-State in August, 2000. He is responsible for teaching HN 718, Physical Health & Aging, and team-teaches HN 635, Nutrition & Exercise with kinesiologist Dr. David Poole. This summer, Haub kicks off a new course, HN 782, Sports Nutrition for Coaches.

Haub's research involves studying the human body to determine when it uses glucose and when it prefers to use fat to fuel its energy needs. His research has led to several intriguing questions.

Does energy expenditure of glucose or fats during rest differ for people who have diabetes, obesity, or high blood levels of cholesterol or triglycerides? What about the use of glucose or fats by people who are physically fit, or persons following a certain type of diet? Dr. Haub wants to find out how to

Haub wants to find out how these may influence health and performance.

Haub intends to recruit men and women who are "twenty to thirtysomething" years old, as well as those people who have already retired. He will have them exercise and feed them meals in Justin Hall.

Another area of research interest for Haub is using the DEXA, an instrument which measures bone density and body composition. This large, state-ofthe-art piece of equipment is also used for public outreach and community service. By calling Haub, students and other citizens can schedule an appointment to have their bone density measured or their body composition analyzed. In addition, physicians may refer patients with disordered eating, and coaches may request to have their athletes measured.



In addition to teaching and conducting research, Haub advises a senior honors project and hopes to start several M.S. students in Human Nutrition next fall. He is also developing a course on human metabolism and chronic disease.

Haub spent his grade school years growing up in Dwight, Kansas, then graduated from Topeka West High School. He earned his B.A. from Ft. Hays State in psychology, and went on to earn his graduate degrees from the University of Kansas in exercise science and exercise physiology. He completed a post-doctoral fellowship in nutrition and physiology in the Nutrition, Metabolism and Exercise Laboratory of the geriatrics department at the University of Arkansas for Medical Sciences in Little Rock before joining the faculty at K-State. Haub has published his research in several journals related to both sports nutrition and exercise.

Haub is married to Michelle, who works as a speech therapist with Geary Rehabilitation. In his spare time, Haub enjoys running, playing with his dog and spending time outdoors.

### $http://www.oznet.ksu.edu/ext\_f\&n/NUTLINK/pages/ADULT.HTM$

Part of KSU's Extension Human Nutrition Links Pages

#### http://www.oznet.ksu.edu/extrapidresponse/recipes.htm

KSU's Rapid Response Center website offers a list of university collections, recipe searches, government sources, food organizations, cooking magazines and recipes from food companies.

# http://www.nal.usda.gov/fnic/consumersite/men.htm

Nutrition over the lifecycle - men's health.

http://www.healthfinder.gov Search for men's health

### **Tough Guys Get Foodborne Illness, Too!**

Indigestion or stomach flu sometimes is self-diagnosed when, in fact, it is really foodborne illness. This is a condition that can be prevented by following a few simple food handling practices, starting with thorough hand washing with soap and water. In reality, all foods can cause illness if not handled properly. At room temperature, bacteria in food can double every 20 minutes! This is the rationale for the recommendation to discard any perishable food left at room temperature for longer than two hours. This is especially important for picnicking when outdoor temperatures soar above 90° F. When it is that hot, food should be discarded after one

It is a good idea to use a cooler with ice or freezer packs when taking food to a sporting event or other outdoor activity, especially if it is not going to be eaten within two hours. It is safer to carry a cooler inside the air conditioned car than to place it in the hot trunk.

hour!

Hunters are well advised to dress game in the field right after shooting, then chill it as soon as possible at 40° F or below until it can be cooked or frozen. County extension offices have information on handling wild game.

In the war against foodborne illness, one of the best weapons is a thermometer. The danger zone in which bacteria can begin to win the battle is 40°-140° F. Some thermometers are designed for

monitoring the temperatures in refrigerators (40° F or below) and freezers (0° or below). Others are useful for determining the doneness of cooked food.

Summer is when the all-American pastime of outdoor grilling is enjoyed by many a backyard chef. However, there are a few food safety pointers to help ensure satisfied guests. For example, completely thawing meat before putting it on the grill will help achieve a product that is evenly cooked. Marinating meat is a great way to tenderize and add flavor, but it should always be done

in the refrigerator. Measuring the internal temperature of cooking meat is the best way to "know" meat is done. Hamburgers can appear done when they are in fact

Internal temperatures for some popular grilled meats:

-Hamburgers-	$160^{\circ}  \mathrm{F}$
-Ground poultry-	165° F
-Medium rare steaks-	$145^{\circ} F$
-Medium steaks-	$160^{0}  \mathrm{F}$
-Well-done steaks-	170° F
-Poultry breast -	170° F
-Poultry dark meat-	180° F

\*\*\*\*\*\*\*\*\*\*

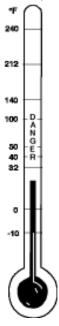
Although it may seem practical to put cooked food back on the plate that originally held the raw meat, this is a formula for cross-contamination. If leftover marinade is to be used as a sauce for the cooked meat, it should be boiled first before serving. This will destroy any remaining bacteria picked up from the raw meat.

The days of using raw eggs in homemade egg nog or ice cream are over. The potential danger of salmonella can be avoided by substituting convenient and safe alternatives to raw egg. Grocery stores now carry pasteurized eggs which can be found in either the refrigerated or frozen food sections.

Even *healthy* men can succumb to the discomforts of foodborne illness. However, with a few precautions, the risk can be minimized.

#### Sources:

FDA/CFSAN Food Safety Facts for Consumers: Playing it Safe With Eggs, 2001. FSIS/USDA Consumer Information: Barbecue Food Safety, 1997. FSIS/USDA. Cooking for Groups: A Volunteer's Guide to Food Safety. 2001. Duyff, Roberta, The ADA's Complete Food & Nutrition Guide, Chronimed, 1998.



### And Now a Word From Our Readers . . .

As promised, here are the results What DO YOU THINK OF from our reader survey in the last issue.

#### WHO RESPONDED?

Forty-four readers responded with five surveys submitted via the web; not all surveys were fully completed. Twenty-four responders were between 21 and 50 years, eighteen were between 51 and 65 years and one person was over 65. Input was given from nine nutrition instructors, one WIC dietitian, eleven FACS agents, six high school teachers and fourteen who checked 'other' in the career list. 'Other' careers were retired teacher, clinical dietitian, and child nutrition program provider. Interest in nutrition issues was very high for 42 and somewhat high for two people. Nutrition Spotlight use was high for 18 readers, moderate for 22, and minimal for 4 with increasing use reported by 21, no change for another 21 and less use for one responder. All responders identified Nutrition Spotlight as an extremely (61%) or somewhat valuable resource.

#### WHAT ABOUT THE NEWSLETTER DESIGN?

Nutrition Spotlight design components (e.g., font, page size, graphics, frequency, length, and web availability) met reader approval. Scaled from 1 (very satisfied) to 5 (not very satisfied), all seven features had a median score of 1. One person noted dissatisfaction with publication frequency; margin notes suggested it be increased. Nutrition Spotlight availability at http://www.oznet.ksu.edu/ext\_f&n/ spotlight/ was a surprise for eighteen (41%) readers who left the item blank or added a question mark.

# **NUTRITION SPOTLIGHT FEATURES?**

Compared to the design elements, newsletter feature reviews varied more. All but one or two respondents rated the cover story, family topic focus, full page and shorter articles useful. However, 10% of the returned surveys noted the table of contents and recipes to be less useful; the calendar was not useful for 21%. The most useful feature was the short article, with the cover story and full-page article not far behind.



#### WHAT ABOUT OUR SPECIFIC **OUESTIONS?**

You helped us answer some nagging questions. For example, although a theme is useful (for 61%), it really doesn't matter to 39%. We will continue to include cited references because 27 readers wanted them; only 3 did not want them (it didn't matter to the remaining 16). The verdict is still out on whether to include more handouts: 26 wanted them, 9 didn't and it didn't matter for 9 people. Over three-fourths (77%) noted that Nutrition Spotlight helps them feel

connected to KSU and 95.5% said KSU was using human and material resources wisely by producing this newsletter!

#### WHAT TOPICS SHOULD BE IN **FUTURE ISSUES?**

Evidently, lots of them. On average, 15 topics (out of 27 possible) were checked and each topic was marked by at least 6 people. Seven topics were identified by more than two-thirds of the readers: Physical fitness/ exercise (36), children's nutrition (35), new food products (35), food safety (32), adolescent nutrition (31), weight control (30), and nutrition for adults (29). Other areas of keen interest included managing food budgets (28) and eating on the run or during travel (28). Infant nutrition, food labeling, medication interactions, herbal supplements (all 23) and nutrition for mental illness (21) uniformly appealed to readers. Another diverse cluster of interests included genetics (15) substance/ alcohol use (14) and breast feeding

Many of you wrote motivating, heart-warming comments; some gave excellent suggestions. Thank you for all the input. Please know that you don't need to see a survey to give us some input. We hope Nutrition Spotlight meets your needs, so let us know anytime you have an idea, a concern, or a comment.

### http://www.menshealthweek.org/

Men's Health is a Family Issue

#### http://www.cdc.gov/health/ mensmenu.htm

Centers for Disease Control and Prevention: Men's Health

### Eating For 2 . . . Hundred Million



#### Good nutrition is essential for sperm health

The role of healthy diets in women's reproductive success is well established. Less well known, however, is the vital role nutrition plays in men's reproductive health, especially sperm health. Zinc, selenium, nickel, folic acid, and vitamin B12 are key nutrients for producing sperm with the vigor and in the quantity needed for successful reproduction.

Zinc. Heavy smoking is associated with cadmium toxicity, decreased sperm count and motility. In rats, zinc supplementation decreased cadmium levels and improved sperm quality. Zinc supplements under 50 mg are considered safe; higher amounts may impair immune function and hurt copper status. Good

sources of zinc include animal foods and whole grain yeast breads.

#### Selenium. A

unique protein, responsible for helping sperm move, relies on selenium. In

mammals, the highest concentration of selenium is found in sperm, and selenium deficiency has been associated with infertility. In one fertility clinic study, selenium treatment improved sperm health and paternity was achieved by more men than those in the placebo group. Good dietary sources of selenium include Brazil nuts, tuna (light, canned in water), cooked

chicken and beef, eggs, pasta, great northern beans, rice, and whole wheat. Selenium content of plants varies with soil quality, but is more uniform in animal foods. Food distribution practices in North America help ease the chances of selenium deficiency among persons living in a selenium-poor area.

Nickel. Nickel appears to be important for normal sperm motility and density. USDA researchers found that rats fed a nickel-deficient diet had decreases in both sperm motility and density. Rich sources of dietary nickel are chocolate, nuts, dried beans, peas, and grains. Research suggests an

interaction between nickel and folic acid that affects vitamin B12 function. Vitamin B12 deficiency has been shown to interfere with normal development of testicular tissue in rats. Sperm counts are higher in men

with good folic acid levels; smokers have lower blood levels of folic acid.

Alcohol. Researchers have looked at the effects of alcohol on the probability of conception. In a large study of Ontario farm couples, use of more than ten glasses of beer a week or six glasses of liquor by men was associated with decreased

conception. The complexity of caffeine use limits conclusions, but it was shown that conception rates decreased when men consumed more than three cups of tea per day.

Summary. Examining the effect of nutrition on sperm health is important; sperm health is considered a good indicator of public health. New research will certainly clarify some of the issues related to nutrients and health-related behaviors and further develop the current understanding that men's dietary practices directly influence sperm health.

#### Sources:

Al-Bader A et al. 1999. Arch Androl 43:135-40. Curtis KM, Savitz DA, Arbuckle TE. 1997. American Journal of Epidemiology 146:32-41. Holben DH, Smith AM. 1999. Journal of the American Dietetic Association 99:836-43. Kawata T et al. 1997. Int J Vitam Nutr Res 67:17-21.

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Shils et al. [eds] 1999. Modern Nutrition in Health and Disease. Baltimore: Williams & Wilkins, pp 294-5.

Wallock LM et al. 2001. Fertil Steril 75:252-259.

# http://busycooks.about.com/gi/pages/mmail.htm

The Kitchen Timer, a free weekly newsletter for busy cooks.

#### www.homestead.com/ cookinlessons/index.html

An online course in basic cooking.

#### www.family.go.com/recipes/ Disney's family ideas, articles,

Disney's family ideas, articles recipe and dinner solutions.

#### http://www.justmove.org/ home.cfm

Just Move: American Heart Association Fitness Center

#### http://www.beactive.org/

Physical Activity: It fits with life.

### **Spiced Pork Chops**

4 servings

1/2 cup flour

1 1/2 teaspoons garlic powder

1 1/2 teaspoons ground mustard

1 1/2 teaspoons paprika

1/2 teaspoon celery salt

1/4 teaspoon ground ginger

1/8 teaspoon dried oregano

1/8 teaspoon dried basil

1/8 teaspoon salt

1/8 teaspoon pepper

4 pork loin chops, about 3/4 inches thick

1-2 tablespoons cooking oil

1 cup ketchup

1 cup water

1/4 cup brown sugar

- 1. In a shallow dish, combine first 10 ingredients; dredge pork chops on both sides.
- 2. In a skillet, brown pork chops in oil on both sides. Spray 9 X 13 inch baking dish with cooking spray and place pork chops in dish. Combine ketchup, water and brown sugar; pour over chops.
- 3. Bake, uncovered, at 350 degrees for 1-hour or until tender, or until internal temperature is  $160^{\circ}$  F

### **Nutrition for Your Prostate!**

Prostate cancer is the second leading cause of death in American men. The good news is that there is considerable evidence that a diet rich in fruits, vegetables and whole grains may lower the risk of developing prostate cancer. The antioxidant lycopene may be particularly helpful. Its most plentiful source is tomatoesalthough it can be found in other foods such as red grapefruit and watermelon. Lycopene is a member of a family of pigments called carotenoids and is responsible for giving tomatoes their red color. It can be best absorbed in its cooked form such as in tomato sauce and paste (up to three times higher than from fresh tomatoes). It appears that tomato sauces, such as spaghetti or pizza sauce, prepared with a little oil increase the absorption of lycopene. The optimal number of servings of lycopene-rich foods is yet to be determined, but some studies suggest seven to ten servings a week offer maximum health benefits. A serving is equivalent to ½ cup of spaghetti sauce or one slice of pizza with tomato sauce. Other studies have shown that cruciferous vegetables such as cauliflower and broccoli may reduce risk of prostate cancer.

Whole grain products, nuts and seeds also seem to offer a protective effect. A recent study showed that a form of vitamin E *only found in foods* (*not* in vitamin supplements) such as corn and soy oils and even avocados seems to be protective. Moreover, studies are now indicating that in addition to a varied diet, moderate exercise may help reduce the risk of prostate cancer. As there is mounting evidence that numerous phytochemicals may reduce the risk of cancer, it makes good sense to eat a variety of fruits, vegetables and whole grains for good health!

Sources: AICR, Diet, Nutrition and Prostate Cancer, 2000, Jnatl Canc Inst 2000;92:44, Jnatl Canc Inst 2000; 92;1, Jnatl Canc Inst 1999; 91:15

	ontainer 1		
Amount Per Se			_
Calories 360	Ca	lories fror	n Fat 90
		% Daily	y Value *
Total Fat 10g			16%
Saturated F	at 2.5g		13%
Cholesterol 65	img		21%
Sodium 1040r	ng		43%
Total Carbohy	drate 44g		15%
Dietary Fibe	er 2g		
Sugars 20g			
Protein 25g			
Vitamin A 25%		\ <i>(''</i>	
Calcium 6%	•	Vita	min C 20%
*Percent Daily Values	are based on a 2	000 calorie di	
daily values may be hi			
needs. If your calorie			
amounts recommende	d forcalories, fats	, carbohydrate	, and fiber.
	Calories	2,000	2,500
Total Fat	Less than	65q	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400 mg	2,400mg
Potassium		3,500mg	3,500mg
Total Carbohydrate		300g	375g
Total Carbonyurate		300g	5,09
Dietary Fiber		25g	30g
,		•	•

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#### New Legislation Focused on Men's Health

Legislation was introduced on Capitol Hill earlier this year calling for the creation of a federal Office of Men's Health to further research on diseases affecting American men. According to sponsors of the bill, the office is needed because too many men are conditioned to ignore their health and to avoid going to the doctor.

Congressmen Randy Cunningham (R-CA) and James McDermott (D-WA), sponsors of the bill, said men's overall life expectancy has gone from equal that of women's in 1920 to being more than six years shorter today. In addition, men are 25% less likely to visit a doctor than are women.

The bill calls for an office within the Department of Health and Human Services that will concentrate on directing research and educating the public about the importance of early detection and timely treatment for a number of primarily male diseases. The office's focus will include prostate cancer, which killed 32,000 American men in 2000, according to the National Bureau of Health Statistics.

The bill is gathering support from both sides of the political aisle, and is endorsed by the National Medical Association, which represents some 25,000 African American doctors across the U.S.

Source: http://www.nytimes.com/reuters/health/health-men.html