



Food Safety Specialty Section NEWSLETTER



Volume 8, Issue 1

March 2002

President's Message

Robert Roth

FS³ was instituted as a Specialty Section of the SOT in 1993. Since then, we have continued to develop as a contributor to the activities of the Society, which itself has evolved in the past several years. Now that we have been up and running for almost a decade, the FS³ Executive Committee thought that it was time for a review of the **Section bylaws**. At the last Executive Committee meeting, several improvements were proposed, and VP-Elect **Joel Mattsson** volunteered to organize them for presentation to the membership.

Amendments to specialty section (SS) bylaws must be presented in writing by any SS member at an SS meeting. At the meeting, a motion for consideration of the amendments will be entertained and, if passed by a majority present, the proposed changes will be circulated thereafter to the membership along with a ballot. A two-thirds affirmative vote of the ballots returned within 30 days is needed for the adoption of any change. From there, the bylaw amendments must be approved by SOT Council before they become effective.

We have enclosed a copy of the proposed amendments for your perusal with the hope that

this will facilitate discussion at the Annual FS³ Business Meeting in Nashville. Most of the proposed changes are designed to clarify procedures and executive committee responsibilities. A major proposed change is the addition of a **fourth councilor**. As you will see as you read, each councilor has a designated responsibility (communications, membership, etc). As activities and requests for action from FS³ have increased over the past several years, having a fourth councilor to handle special projects and otherwise provide help with ongoing projects stands to enhance the effectiveness with which FS3 will contribute to SOT activities and requests for action. For example, this past year FS³ was asked to provide help in writing a SOT position paper and to recommend individuals for NIH review groups. The fourth councilor would be expected to aid in mobilizing the Specialty Section to handle such requests. Additionally, adding a fourth councilor will enable the election of two councilors every year, which will eliminate confusion that has arisen under the current, 3-councilor system, in which some years require one and others two councilors to be elected.

Please read the enclosed amendment proposals and come to the **Business Meeting/Reception** on Monday, March 8, at 6:30 PM in the Lincoln E Room of the Opryland Hotel with your comments and be prepared to vote on sending them to the membership for adoption.

One last plea: Please consider proposing a session for the **2003 annual meeting**—suggestions for a symposium, CE course or workshop are welcome. Joel Mattsson will help shepherd you through the planning and submission process.

See y'all in Nashville.

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“You are what you eat” to “You eat what you are”

by Madhu Soni, Ph.D., Burdock Group

Nutrigenomics? With the publication of the human genome, we are entering the era of genetic nutrition. The publication of the human “blueprint” has triggered an explosion in pharmaceutical research to utilize this knowledge to better design drugs that consider the genetic makeup of susceptible individuals. The line between food and drug is blurring in the era of the genome. These developments are certainly affecting the nutritional sciences. Food companies will be able to design food based on particular groups sharing the same genetic makeup. People already make dietary choices based on their genetics, such as switching to soy milk for lactose intolerance, using cholesterol lowering spreads, etc. In future genetic studies will help identify which individuals will benefit the most from particular foods. Before we enter this era however, we will need to know our genetic makeup for susceptibility genes. Eating a diet designed on the basis of genetic makeup could help individuals avoid diseases such as coronary disease, diabetes, cancer, central nervous disorders, etc, with much greater precision than possible today. In future genetic studies will help identify which individuals will benefit the most from particular foods. Before we enter this new era of nutrigenomic, there is a need to make a person’s genetic information accessible and affordable. Don’t be surprised to see one day people carrying their genetic blueprint to the grocery store to shop. These developments will certainly have an impact on the nutrition, health sciences and food safety related issues.



Specialty Section Business Meeting

The annual FS³ meeting is tentatively scheduled for Monday evening at 6:30 pm in the Lincoln E Ballroom. Please mark your calendars.

Election Results for 2001-2002 FS³ Executive Council

The following individuals were elected to their respective offices for the 2002-2003 FS³ Executive Council:

Vice-President Elect

Ron Riley (rriley@ars.usda.gov)

Secretary Treasurer

Ken Voss (kvoss@ars.usda.gov)

Councilor

George Burdock (gburdock@burdockgroup.com)

Congratulations to these individuals!

FS³ Communications Chair: **Bryan Delaney.**

Newsletter Editor: **Keith Tolson**, University of Florida.

Tolson@ufl.edu

Thanks to all the contributors. Know of an upcoming meeting, a new food toxicology book, something brewing at the FDA? Share it through the FS³ Newsletter. The FS³ Newsletter is available on the World Wide Web at <http://www.sot.org> .

“Manganese Intake in Dietary Supplements”

by Sandy Bigelow, Ph.D.

Premise: The high amount of the essential nutrient manganese used in dietary supplements is not supported by the available data, when consumed on a chronic basis.

Manganese (Mn) deficiency is not prevalent in the U.S. Mn is a cofactor for many enzymes including arginase and superoxide dismutase. Adequate Mn comes from three major sources: diet, dietary supplements, and drinking water (1,2). Adult men and women have an adequate dietary intake of 2.3 and 1.8 mg Mn daily, respectively (1). Cereal grains and nuts are the major dietary sources of Mn. Several balance studies show that Mn equilibrium ranges from 2 to 2.5 mg daily. Equilibrium is maintained via a homeostatic mechanism between absorption from the gastrointestinal lumen and biliary excretion. In general, normal intake is balanced by excretion in individuals with normal Mn intake.

Excess Mn intake can occur when high dietary intakes are coupled with consumption of Mn from dietary supplements and drinking water. Drinking water, especially mineral water, contains relatively high levels of Mn that can exceed the U.S. EPA water quality limit of 0.05 mg per liter (2). Kondakis et al. (1989) found that Greek citizens who drank water that exceeded EPA's limit exhibited adverse neurological signs (3).

Some dietary supplements contain 5 mg or more of Mn per capsule, with the label directions suggesting the consumption of 2 or more capsules daily. Over-consumption of Mn over a period of months can lead to weakness, fatigue, tremors, dementia, and to symptoms that mimic Parkinson's disease. Young children and the elderly are at increased risk because of the developmental state of their nervous systems. Individuals with liver disease or with iron deficiency are also at increased risk to these effects. Concerned about Mn intake from dietary supplements, the National Research Council in 2001 set a limit of 11 mg of Mn daily for intake from all dietary sources—food, water, and dietary supplements.

For example, dietary supplements designed for the nutritional support of bone and joints have been found to suggest a daily serving ranging from 40 to 200 mg of Mn. Many other brands of supplements suggest a daily serving of 10 mg or more Mn. This amount of Mn intake, even considering short-term use over several months, is unsupported by the available data considering the potential for these adverse effects and that equilibrium is reached at daily dietary intakes of 2 to 2.5 mg of Mn.

A reasonable limit for suggested daily amounts of Mn in dietary supplements is 2.5 mg daily—based on Mn equilibrium and the multiple sources for Mn intake. Any higher intakes are unnecessary and are not supported by the available scientific information.

References

1. National Research Council. 2001. *Dietary Reference Intakes for Vitamin A, Vitamin K, Arsenic, Boron, Chromium, Copper, Iodine, Iron, Manganese, Molybdenum, Nickel, Silicon, Vanadium, and Zinc*. Panel on Micronutrients, Subcommittees on Upper Reference Levels of Nutrients and of Interpretation and Use of Dietary Reference Intakes, and the Standing Committee on the Scientific Evaluation of Dietary Reference Intakes, Food and Nutrition Board. National Academy of Sciences, Washington, DC. pp. 650.
2. Environmental Protection Agency. 2001. Title 40 *Code of Federal Regulations*. Part 143. Secondary maximum contaminant levels.
3. Kondakis, X.G., Makris, N., Leotsinidis, M., Prinou, M., and Papapetropoulos, T. (1989) Possible health effects of high manganese concentration in drinking water *Arch. of Environ. Health* 44:175-178.

Written by Sandy Bigelow. The views expressed herein are those of the author and do not necessarily reflect those of the Society of Toxicology or its subordinate organizations.

Specialty Section of Food Safety Bylaws: January 1995

Proposed amendments Feb. 12, 2002

ARTICLE I - NAME

The Name of this organization shall be the Food Safety Specialty Section of the Society of Toxicology hereinafter designated as FSSS or FS³SSFS.

ARTICLE II - OBJECTIVES

The objectives of the FS³SSFS are:

- ? Promote the credible application of toxicological principles into the evaluation of food safety.
- ? Serve as the focal point for interaction of members of the Society of Toxicology interested in food safety.
- ? Conduct programs and educational activities ~~which that~~ emphasize the latest developments and issues in food safety as they relate to the science of toxicology.
- ? Relate those developments to the activities of the Society of Toxicology, ~~and to stimulate new growth in food safety as it relates to the science of toxicology.~~
- ? Act as a resource to the Society in the area of the Section's interest.

ARTICLE III - MEMBERSHIP

All members in good standing of the Society of Toxicology may become members of the Specialty Section upon payment of Specialty Section dues. Membership in the Specialty Section will be discontinued if dues are not paid on an annual basis or if an individual is not a member in good standing of the Society of Toxicology. A member of the Specialty Section will be dropped from membership if dues are not paid on an annual basis or if he or she is not a member in good standing of the Society of Toxicology. Each member of FS³ is entitled to vote for officers, councilors, and on issues proposed to the membership.

ARTICLE IV - OFFICERS AND COUNCILORS

~~The Specialty Section officers shall be President, Vice President, Vice President-Elect and Secretary-Treasurer. There shall be three Councilors. The Vice President-Elect shall be elected annually and the Secretary-Treasurer Treasurer and one councilor biannually by the Specialty Section members. They shall serve until their successors are installed. Officers and Councilors shall take office on May 1. The Specialty Section officers shall be President, Vice President, Vice President-Elect, Secretary-Treasurer, and Immediate Past President. There shall be four Councilors. The Vice President-Elect shall be elected annually, and the Secretary-Treasurer and councilors will be elected biannually, by majority of the ballots cast by the Specialty Section members. All elected members shall serve until their successors are installed. Officers and Councilors shall take office on May 1.~~

ARTICLE V - ELECTION OF OFFICERS AND COUNCILORS

Section 1. The office of the Presidency shall be for a term of one year. The President, after serving one year, shall be designated immediate Past-President for one year. The President shall preside at all meetings. ~~For the year in which this Section shall first be in effect, both a Vice President and Vice President-Elect shall be elected.~~

Section 2. The Vice President shall become the President of the Specialty Section after serving one year as Vice President. The Vice President shall serve in the absence of the President.

Section 3. A Vice President-Elect shall be elected by a majority vote of the ballots cast and shall become Vice President ~~of the Specialty Section~~ after serving one year as Vice President-Elect. The Vice President-Elect shall serve in the absence of the President and the Vice-President.

Section 4. The Secretary-Treasurer shall be chosen by ~~a majority vote of the ballots cast by~~ the membership for a term of two years.

~~Section 5. There shall be three Councilors who, together with the officers, comprise the Executive Committee. Two shall be chosen by a vote of the membership for a term of two years. One shall be elected each year. The third councilor shall be the immediate Past President.~~

Section 5. There shall be four Councilors who, together with the officers, comprise the Executive Committee. Each shall be chosen by a majority of the ballots cast by the membership for a term of two years. Terms will be staggered such that two councilors will be elected each year.

~~Section 6. A Nominating Committee consisting of not less than three members of the Specialty Section shall be appointed by the Executive Committee within two months following installation of officers. This committee shall provide a slate of candidates for each election. The immediate past president will chair the nominations committee.~~

Section 6. Elections shall be held annually ~~in association with the~~ mail or electronic ballot of the Society of Toxicology.

Section 8. ~~In the event of a vacancy in an elective office other than President, Vice President and Vice President-Elect, the Executive Committee may make an appointment or provide for a special election to fill the vacancy until the unexpired term is completed. In the event of a vacancy in the Presidency, the Vice President accedes to that office; similarly, the Vice President-Elect accedes to the office of Vice President should that office become vacant.~~

Section 7. In the event of a vacancy in the Presidency, the Vice President accedes to that office; similarly, the Vice President-Elect accedes to the office of Vice President should that office become vacant. In the event of a vacancy in Vice President-Elect, the Executive Committee shall provide for a special election to fill the vacancy. In the event of a vacancy in the office of Secretary-Treasurer, the President with assent of the Executive Committee shall appoint a Secretary-Treasurer from the councilors to complete the remainder of the term. In the event of a vacancy in Councilor, the President with assent of the Executive Committee shall appoint a replacement from the membership to fill the vacancy. To allow for contingencies, the Executive Committee has the option to provide for special elections to fill vacancies of Secretary-Treasurer or Councilor.

ARTICLE VI - ADMINISTRATION

Section 1. The Specialty Section shall be governed by the Executive Committee.

Section 2. The Executive Committee shall consist of the ~~five~~ ~~four~~ ~~elected~~ officers plus ~~three~~ ~~four~~ Councilors. The President of the Specialty Section shall be the Chairperson of the Executive Committee; ~~and five~~ ~~Four~~ members of the Executive Committee constitute a quorum for the transaction of business.

Section 3. The President shall preside at all meetings of the Specialty Section and of the Executive Committee and shall perform such other duties as may be directed by the Executive Committee. In the President's absence, the Vice President shall act for the President.

Section 4. The Specialty Section shall comply with provisions for continued authorization by the Society of Toxicology.

- a. The Specialty Section shall provide annual reports of its activities and finances for the current year as well as plans of programs, activities and finances for the following year. Annual reports shall be submitted to the Society of Toxicology Secretary by November 1 of each year.
- b. Annual reports and plans shall be reviewed by the SOT Committee on Specialty Sections.
- c. The SOT Committee shall consult with the Specialty Section as necessary and report to Council with recommendations concerning continued authorization of the Specialty Section.
- d. Society of Toxicology authorization shall be withdrawn from the Specialty Section if it fails to comply with the provisions for continuing authorization.
- e. Specialty Section policy statements must be reviewed and approved by the Society of Toxicology in advance.

Section 5. The Secretary-Treasurer shall pay authorized bills incurred by the Specialty Section as directed by the Executive Committee. Dues and all other funds will be collected and held by SOT for use exclusively by the Specialty Section. The successor to the Secretary-Treasurer shall receive all property of the Section following installation of office. The Secretary-Treasurer shall record all transactions of all meetings of the Section and of the Executive Committee, ~~and~~ shall be responsible for the correspondence of the Section, and shall maintain a current list of members and their status.

Section 6. Ownership of aAny Specialty Section funds or other property remaining at the time of termination or abandonment or dissolution of the Section shall ~~be turned over to be transferred to~~ the Society of Toxicology, ~~and shall become a part of the society's general funds;~~ ~~no~~ No part of any such funds or property shall inure to the benefit of any member or officer of, or person associated with, the Section.

ARTICLE VII - MEETINGS

Section 1. Meetings of the Section shall be held at least annually and as ~~directed by~~ necessary to manage the scientific and educational programs of the Section. The time and place of each meeting shall be established by the ~~Program~~ Executive Committee and communicated to the membership at least two weeks before each meeting. Meetings other than the annual meeting may, at the discretion of the President, be conducted electronically or by telephone conference, or a combination of both.

Section 2. Special meetings of the Section may be called by the President at any time with the approval of the Executive Committee or by presentation to the President of a petition signed supported by 20% of the membership in good standing.

Section 3. All members must be notified of a meeting of the Section at least two weeks in advance, and a quorum shall consist of 20% of the Section's members in good standing.

Section 4. Executive Committee meetings shall be held at the discretion of the President provided that each of the members of the Committee is notified at least seven (7) days prior to the meeting.

ARTICLE VIII - DUES

~~Dues will be established by a majority of the Executive Committee after which they may be changed subject to vote by members of the section.~~ Dues are established by the Society of Toxicology and are the same for all specialty sections. A request for variance from the

established rate shall be directed to the Society of Toxicology Council through the Specialty Section Liaison.

ARTICLE IX - COMMITTEES

Section 1. The Vice ~~president~~-President shall be Chairperson of the Program Committee, whose members are appointed by the Chairperson. The Program Committee shall develop scientific and educational programs consistent with the objectives of the Specialty Section, and provide copies of the material to the Secretary-Treasurer who will, in turn, notify Council of SOT prior to developing the program. The Section's Program Committee shall coordinate its activities with the SOT Program Committee and with other appropriate Specialty Sections.

Section 2. One Councilor, appointed by the President, shall chair the Awards Committee whose members will be appointed by the Chairperson. The Awards Committee shall develop/administer a program for making awards to students and/or postdoctoral fellows.

Section 3. One Councilor, appointed by the President, shall chair the Membership Committee whose members will be appointed by the Chairperson. The Membership Committee shall develop and maintain a program for recruitment and retention of members to the Specialty Section.

Section 4. One Councilor, appointed by the President, shall serve as Chair of the Communications and Newsletter Committee whose members shall be appointed by the Chairperson. The Communications Committee shall develop the newsletter for the Specialty Section.

Section 5. One Councilor, appointed by the President, shall be responsible for leading special projects and aiding the activities of the other councilors as needed.

Section 6. The President shall serve as Chair of the Issues Committee, whose members shall be appointed by the Chairperson. The Committee will be composed of at least five members of the Specialty Section. The Issues Committee will coordinate/organize responses/position papers within the Specialty Section as requested by the SOT Council that pertain to issues of concern to the Society. The Issues Committee will formulate responses/comments on these topics so as to reflect a comprehensive view across the Specialty Section.

Section 7. The Immediate Past-President shall chair the Nominations Committee whose members will be appointed by the Chairperson. The Nominations Committee shall nominate members of the Section for vacant offices each year. The Chairperson of this Committee shall provide the names and brief bibliographic sketch of each nominee to the Society of Toxicology Headquarters for inclusion in a mailing or electronic ballot.

Section 82. The President shall appoint other committees as required and shall ~~automatically~~ act as an ex-officio member of such committees. Members of such committees shall serve at the discretion of the President.

ARTICLE X - AMENDMENTS

Section 1. Amendments to these Bylaws may be presented by any member of the Specialty Section in good standing at any regular meeting of the Section or at any special meeting called for that specific purpose. They shall be presented in writing and shall be offered to the membership present at that meeting on motion for consideration and circulation to the membership. A simple majority of voting members shall be necessary to pass the motion.

Amendments accepted for ~~future~~ consideration ~~and circulation~~ shall be ~~printed and~~ circulated with a ballot by regular or electronic mail to all members in good standing. A two-thirds affirmative vote of the ballots returned within 30 days shall be necessary for adoption of any amendment.

Section 2. Amendments to these Bylaws must be approved by the council of the Society of Toxicology before they become effective. This is done to insure the Section that future changes in these Bylaws will have the same force as the original, which was so approved.