

2547

Gelnett, Wanda B.

From: Jewett, John H.
Sent: Thursday, November 09, 2006 4:06 PM
To: Gelnett, Wanda B.; Wyatte, Mary S.; Wilmarth, Fiona E.; Leslie A. Lewis Johnson
Subject: FW: EPGA Comments, Ref. #7-405 (#2547)

Wanda:

This email and its attachment should be placed in "Final comments" for #2547.

In addition, the attachment includes web "hyperlinks" to supporting materials.

Wanda, if you can't open them, please let me know. Thanks!

-----Original Message-----

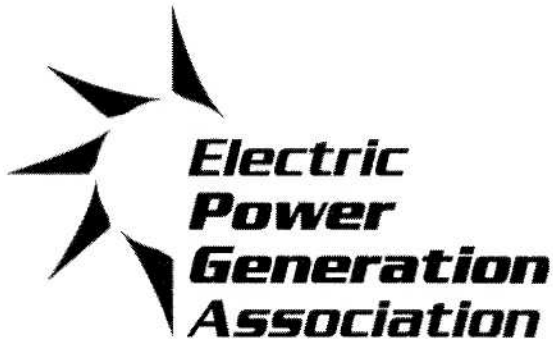
From: Teresa McGee [mailto:teresa@epga.org]
Sent: Thursday, November 09, 2006 3:39 PM
To: IRRC
Cc: Biden, Doug L.; Jewett, John H.; Smith, James M.
Subject: EPGA Comments, Ref. #7-405 (#2547)

Alvin C. Bush
IRRC Chairman:

Attached, please find comments of the Electric Power Generation Association on Regulation # 7-405 (#2547).

Regards,

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November 9, 2006

Honorable Alvin C. Bush
Chairman
Independent Regulatory Review Commission
333 Market St., 14th Floor
Harrisburg, PA 17101

RE: Environmental Quality Board - Standards for Contaminants – Mercury (#7-405)

Dear Chairman Bush:

The Electric Power Generation Association would like to offer these additional comments on the final Environmental Quality Board (Board) regulation reducing mercury emissions from power plants now before your Commission for action.

The Electric Power Generation Association is a regional trade association of electric generating companies which own and operate more than 122,000 megawatts of electric generating capacity in the United States. As a result, we collectively have considerable experience in operating generating facilities and in taking actions to reduce environmental impacts from our facilities.

In fact, member companies have already taken steps to reduce mercury emissions by 33 percent from power plants in Pennsylvania from 1999 to 2004 and have announced plans to invest more than \$3 billion in advanced air pollution control equipment which will further reduce mercury, as well as emissions of sulfur dioxide and nitrogen oxide. The question is not whether to reduce mercury emissions, but how to do it in a way that does not threaten family-sustaining jobs, electric reliability, the use of Pennsylvania coal, cause significant increases in the cost of electricity or disruptions in the regional energy markets.

EPGA offers these additional comments for your consideration with the details on each following:

- The Requirement to Meet a Hard Cap Without Trading Effectively Imposes a 95 to 98 Percent Mercury Reduction Requirement Which Will Dramatically Increase Costs and Impair Pennsylvania's Competitiveness;
- "Hot Spots" Argument Provides No Rationale For Rejecting Emissions Trading Especially When the Industry Has Offered to Make 80% and 90% Reductions as Proposed by DEP
- Lack of Emission Allowances Limits Future Clean Energy Options;
- Adoption of the Final Rule Is Not Consistent With State Law;
- New Medical Studies Show Benefits Outweigh Risks of Eating Fish; and
- This is a Substantial Public Policy Issue the General Assembly Should Decide.

The Requirements to Meet a Hard Cap Without Trading Effectively Imposes a 95 to 98 Percent Mercury Reduction Requirement Which Will Dramatically Increase Cost and Impair Pennsylvania's Competitiveness

Although DEP and others have described the proposed rule as requiring an 80 percent reduction in mercury emissions in 2010 and 90 percent reduction in 2015 – 3 years earlier than the federal Clean Air Mercury Rule (CAMR) – the proposed rule is much more stringent than the 80 or 90 percent requirement suggests.

The proposed rule contains both (1) emissions standards (the 80% for phase 1, 90% for phase 2) and (2) annual caps on mercury emissions at each electric generating unit (EGU) that are based on CAMR allowance allocations. The industry has agreed to meet the emission standards (with the feasibility waivers included in DEP's regulations), but cannot accept the added requirement to meet the annual emission caps without trading.

The caps for each EGU will be based on the state's mercury budget allocated by EPA under CAMR. EPA developed the state budgets in the context of a national cap-and-trade program and substantially under-allocated allowances to states like Pennsylvania that burn bituminous coal. Meeting those caps without trading would require reductions of 95% to 98% - which would impose enormous costs on Pennsylvania's EGUs without any environmental benefit beyond that achieved by the 80% and 90% reductions required by the emissions standards component of the regulations.

In addition to the unnecessary expense imposed by the prohibition on emissions trading it also places the state in jeopardy of not being able to comply with its CAMR budget under EPA's rule. This is because meeting the budget allocation may be impossible at some plants. As there is no basis to believe surplus "non-tradable" allowances will be available in the state to make up the shortfall, Pennsylvania may well end up unable to comply with CAMR without forcing the retirement of some generating units and curtailing the output of others. This would be an unfortunate result for Pennsylvania's economy, one that could be avoided by adopting CAMR's cap-and-trade program in conjunction with requiring 80% and 90% reductions at each facility (with the feasibility waivers as provided for in the emissions standards section of the regulations).

The Board has grossly underestimated the cost of implementing the proposed rule and has erroneously based its cost estimates on the cost of simply meeting the 90% reduction emissions standard. This cost estimate overlooks the cost imposed to obtain the 95% or greater reductions necessary to meet the CAMR-based annual emissions cap without trading. In phase 2, to meet the annual cap without trading will require extraordinary capital investments and operating costs. In fact, the cost per EGU will exceed the cost the Board projected for all EGUs combined. Based on what is known about power plant mercury emissions and their fate and transport in the environment, this extreme cost cannot be expected to produce any incremental environmental benefit to Pennsylvania beyond the 80% and 90% reductions required in the emissions standards section of the regulations..

DEP incorrectly claims that the proposed rule is necessary to offset the inequity in CAMR with regard to bituminous coal. To be sure, CAMR under-allocated allowances to EGUs in Pennsylvania burning bituminous coal, with the result that achieving the annual emissions caps based on those allowances requires 95% or greater reductions in mercury emissions from bituminous coal. However, rather than assisting bituminous coal and the EGUs that burn that coal, the proposed rule will increase the burden dramatically compared to their burden under CAMR by prohibiting trading to meet the annual caps.

It is important to remember that the Pennsylvania mercury budget under CAMR is very small, especially for a state that is second in the nation in the production of electricity and dependent on coal for a reliable and affordable power supply. CAMR also requires of Pennsylvania the largest percentage reduction in mercury emissions compared to any other state. Thus, mercury emission reduction compliance costs in Pennsylvania will be large and higher than in competing states, even with emissions trading.

However, allowing emissions trading at least limits potential costs per pound removed to the price of allowances (expected to be less than \$50,000 per pound). Disallowing trading substantially exacerbates the high costs to Pennsylvania EGUs under CAMR, and makes the cost per pound that the EGU may incur to reduce the last few pounds of mercury potentially unlimited.

“Hot Spots” Argument Provides No Rationale For Rejecting Emissions Trading Especially When the Industry Has Offered to Make 80% and 90% Reductions as Proposed by DEP

The Board’s environmental rationale for its proposal, and for rejecting trading, is that mercury is a neurotoxin that deposits locally thereby causing “hot spots.” However, the Board has offered no analysis in support of its contention that “hot spots” may exist or could create public health issues. Furthermore, the Board has not defined a “hot spot”. As the IRRC comments noted, nowhere does the Board identify the methods used for calculating the risk to public health – rather than just asserting that it exists. Nor does the Board offer any analysis of the methods to reduce such risks, the costs or the cost-effectiveness of such methods.

Further, even if there is a legitimate concern about hot-spots, the Board has not explained why emissions reductions expected under the emissions standards provisions of the rule (80% in 2010 and 90% in 2015) will not be sufficient to address that concern.

Finally, , the Board should be required to explain why it is necessary to require punitive annual emissions “caps” requiring reductions of 95 to 98 percent just to satisfy a “policy judgment” to ban interstate trading. This is especially troubling because there has been no demonstration of any health or environmental benefit resulting from this requirement.

EPGA believes that presentations at DEP’s mercury Work Group meetings and at the House and Senate hearings by US EPA, the Electric Power Research Institute (EPRI) and the Brookhaven National Lab provide ample evidence that hot spots of mercury deposition attributable to power plant emissions do not exist, and will not be a problem after implementation of CAMR. We will not repeat those findings here as we included them in prior comments to the Board. However, we would like to bring to the Commission’s attention two new issue briefs from EPRI related to this subject: “Mercury ‘Hot Spots’ – Emissions and Deposition Patterns” and “Interpretation of U.S. EPA Mercury Modeling – How much mercury emitted from a state eventually deposits there?”

The “Hot Spots” brief concludes that power plant mercury emissions do not and will not create or intensify any “hot spots” under CAMR with interstate trading. The modeling brief focuses on the state of Pennsylvania and shows that only 10 percent of all Pennsylvania mercury emissions deposit within Pennsylvania. Taken together, we believe the findings in these two briefs constitute a convincing case against the ban on interstate trading included in the proposed rule, particularly since there has been no demonstration by any party of a need to go beyond CAMR, and not even the suggestion of a need to go beyond the 80% and 90% reduction in the emission standards portion of the rule.

Although there has been no demonstration by any party of a need to go beyond CAMR, we recognized DEP’s desire to ensure that substantial mercury reductions were made within Pennsylvania and not purchased from out of state. Therefore, EPGA along with our labor and industry coalition partners, proposed an alternative that requires 80% mercury reductions to be made at each facility in Pennsylvania starting in 2010 and 90% starting in 2015 – the same levels and timing as DEP’s proposed emission standards. These standards would be met without emissions trading. However, our proposal allowed the more stringent CAMR budget cap to be met through interstate trading. Without this provision we believe Pennsylvania remains at risk of either requiring technologically infeasible emission reductions or exceeding the state’s mercury budget under the federal rule.

A summary of our alternative appears at the end of this letter. DEP has rejected this proposal even though the effect on mercury deposition within the Commonwealth, when compared to the DEP proposed rule, would be immeasurable, as the amount of trading would be severely restricted due to the operation of the emission standards provision.

Lack of Emission Allowances Limits Future Clean Energy Options

As the IRRC observed in its comments to the Board, most of the states with significant coal-fired generation are adopting CAMR or a similar rule that allows for trading of allowances and, for future economic development and reasonably priced electricity considerations, for banking of allowances as well.

The lack of a market-based emission allowance trading system and the more stringent mercury reduction requirements mean there could be a significant shortage of emission allowances available to support the construction of new, cleaner coal-burning electric generating facilities in the future, further limiting our energy options in Pennsylvania.

A market-based emission allowance trading system encourages the over control of emissions on power plants where it is economically and technically feasible because the owners of those plants can sell those credits to others that need them.

Under the final rule, there is simply no incentive to generate any emission allowances beyond those needed to meet the mercury reduction standard because those allowances could be assigned to other, possibly competing power plants by DEP.

In addition, the more stringent 95 to 98 percent emission reduction requirement at each facility means there will be far fewer or no extra allowances available in the first place because of the more stringent CAMR cap.

One of the advantages of the federal cap-and-trade program is the ability to “bank” emission allowances to use to offset emissions from new, future generation. Without the ability to bank, future generation can grow only at the expense of existing generation. For a state like Pennsylvania, which is currently the largest generating state in the 14-state PJM wholesale market, and the second largest generating state in the United States, the inability to bank emission allowances constitutes a significant barrier to future expansion of coal-fired electric generating capacity and economic development.

What’s at stake is Pennsylvania’s share of nearly \$140 billion worth of investment in 93,000 megawatts of new coal-fired generating capacity that the US DOE expects to be built in the next 20 years.

A state that willingly subjects its coal-fired power plants to the level of competitive disadvantage inherent in this proposed rule cannot hope to attract its fair share of that future investment. A state with no banked allowances may be physically unable to attract that investment without putting its existing sources at further severe competitive disadvantage, possibly out of business. This situation will be further exacerbated by the proposed major transmission projects in PJM that will place even greater competitive pressure on (and could bypass) Pennsylvania based electric generation.

Adoption of the Final Rule Is Not Consistent With State Law

The Department of Environmental Protection has failed to provide the justification required by the state Air Pollution Control Act for regulating mercury in a way that goes beyond federal requirements or as a hazardous air pollutant. While presenting a case for mercury control in general (which to our knowledge no party has disagreed with) DEP has not made the case for the incremental health benefits to be gained from the Pennsylvania-specific mercury rule. The Department has simply implied (and in some cases openly asserted) that no mercury reductions in Pennsylvania could occur without the state-specific rule.

The state Air Pollution Control Act authorizes the Environmental Quality Board to regulate hazardous air pollutants (HAPS) subject to several provisions.

First, the Board has general authority to establish standards for HAPs for sources not included on the list of sources for HAP regulation under Section 112(c) of the federal Clean Air Act.

Second, the Board may adopt a health risk-based standard when needed to protect the public health. To do so, however, the board must provide a specific rationale, considering criteria such as public health significance and commercially available methods and costs to reduce such risks, as described in Section 112(f)(1) of the CAA.

Third, the board may not establish a more stringent standard for HAPS from existing sources than EPA establishes, unless justified as a health risk-based standard.

Finally, if EPA has not adopted a standard to control HAPs from a category of sources in accordance with the CAA schedule, DEP may establish an emission standard for a category of sources on a case-by-case basis for such sources, but that standard must be equivalent to the standard that would apply if EPA were to adopt a standard under Section 112 of the CAA.

DEP, by its own statements, has not provided the information, studies and justification needed to demonstrate the final rule meets these requirements, nor provided a case-by-case standard required by the state Air Pollution Control Act.

New Medical Studies Show Benefits Outweigh Risks of Eating Fish

New studies by the national Institute of Medicine and a Harvard School of Public Health study published in the *Journal of the American Medical Association* in October found the health benefits of eating fish regularly outweigh the risk from mercury and other contaminants, even for pregnant women and children. (See National Institute of Health, Health Day and Washington Post articles.)

The health risk of mercury to humans comes from eating fish contaminated by mercury, not through direct exposure to mercury emissions in the air.

Statements by the Department of Environmental Protection, presentations before DEP's Mercury Work Group and testimony by medical professionals before the Senate and House Environmental Resources and Energy Committees had previously concluded there were no studies to link mercury emissions from Pennsylvania power plants with any human health impacts in the Commonwealth.

DEP has consistently been unable to document any additional health or environmental benefits from adopting its final rule over the reductions achieved by the federal Clean Air Mercury Rule, especially in the face of scientific evidence that only 10 percent of mercury emitted in Pennsylvania is deposited in Pennsylvania.

This is a Substantial Public Policy Issue the General Assembly Should Decide

The public policy issues—environmental, health and economic—raised by this final rule will have a significant impact on family-sustaining jobs, electric reliability, the future use of Pennsylvania coal, the cost of electricity and regional energy markets. It must be emphasized that the Pennsylvania mercury rule, as currently proposed, places Pennsylvania EGUs at a severe competitive disadvantage compared to those in other states that are adopting CAMR. This is particularly troubling given that these sources must compete for generation market share in the largest and arguably most competitive wholesale power market in the world – PJM (The PJM market now extends from New Jersey to North Carolina to Northern Illinois and includes more than 165,000 megawatts of generating capacity.).

The Senate and House Environmental Resources and Energy Committees have held an unprecedented five public hearings on the implications of this rule and to look for alternatives that will significantly reduce mercury emissions without causing negative impacts on the Commonwealth.

The Senate has already taken bipartisan action and voted overwhelmingly to support an alternative emissions reduction plan, and more than 100 House members have introduced and have been working on their own plan, but unfortunately time will likely run out in this legislative session before any final action can be taken.

We believe the implications of the rule are so profound for the economy of Pennsylvania that establishing a mercury emissions reduction program should not be left to a rulemaking petition process where unelected members of the Environmental Quality Board have the ability to make this critical decision.

This issue should be resolved in the General Assembly and we would encourage the Commission to make this recommendation in its final action.

We believe these and other comments placed on the record offer more than enough justification for the Commission to disapprove this final rule based on several criteria outlined in the Regulatory Review Act, including:

- Direct and indirect costs imposed on the Commonwealth;
- Adverse effects on prices of goods and services;
- The protection of the public health, safety and welfare and the effect on natural resources;
- The reasonableness and need for the regulation; and
- A substantial policy that requires legislative review.

Accordingly, we respectfully recommend disapproval. Thank you for considering these additional comments. Feel free to contact me at any time about these comments.

Sincerely,

Douglas L. Biden

Douglas L. Biden
President
Electric Power Generation Association

Attachments:

1. Electric Power Research Institute, *Interpretation of U.S. EPA Mercury Modeling – How much mercury emitted from a state eventually deposits there?*, State of Pennsylvania, October 9, 2006
2. Electric Power Research Institute, *Mercury “Hot Spots” – Emissions and Deposition Patterns*, Issue Brief, August, 2006

These comments represent the views of EPGA as an Association of generating companies, not necessarily the views of any particular member company with respect to any specific issue.

Alternative to the Proposed DEP Mercury Regulation:

This alternative proposes that the Department of Environmental Protection (DEP) utilize a mercury control strategy that mimics the highly effective nitrogen oxides control strategy. Under this strategy, Pennsylvania would implement a Pennsylvania specific rule that requires all major source coal-fired units/facilities to meet an 80 percent reduction in 2010 and a 90 percent reduction in 2015. This proposal also allows for the implementation of presumptive mercury control technologies and alternative measures or technology that control mercury emissions by Jan. 1, 2010 for those sources which cannot technically or economically install control equipment to meet the specified standards. Simultaneously, DEP would issue a separate regulation that implements the “cap and trade” provisions of the CAMR. This multi-regulation approach has been extremely effective in controlling nitrogen oxides emissions as they relate to not only local concerns, but also relative to transport issues.

The Pennsylvania specific regulation:

- Applies on a unit specific basis.
- Results in unit specific emission limitations that could not be exceeded through emission allowance trading or use of emission reduction credits
- Is required regardless of the type of coal burned
- Allows alternative technologies to define the appropriate control technologies and strategies of smaller units
- Satisfies the EQB approval to develop a PA specific mercury rule

In addition to the Pennsylvania specific mercury rule, generators would still be required to comply with Pennsylvania CAMR emissions budgets (“cap”), which would include participation in the nationwide “cap-and-trade” program.

Benefits:

- Eliminates concerns about “hotspots” by requiring mercury emissions reductions at every PA coal-fired generating facility
- Does not drastically impair competitiveness of Pennsylvania wholesale electric generators, coal suppliers and support services and industries relative to out-of-state competitors even though it is more stringent than the CAMR requirements alone
- Helps to control electricity costs which helps to minimize drag on economic growth in Pennsylvania
- Provides for the most cost-effective “co-benefits” control strategies to be implemented through the implementation of CAIR
- Provides for certainty of compliance which is a critical need relative to obtaining financing and satisfying investors
- Accelerates installation of control equipment at many PA generating facilities by “front loading” the control measures at some facilities that would otherwise not be implemented until 2018, which then achieves the full mercury reductions by 2015 rather than 2018 through the implementation of Phase II of CAIR.
- Preserves the Environmental Quality Board’s approval of the PaDEP recommendation to develop a Pennsylvania specific Hg rule
- Does not disadvantage Pennsylvania wholesale electric generation in the event the CAMR is over-turned
- Guarantees that Pennsylvania will be able to comply with its federally mandated mercury budget.



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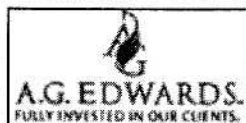
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CORRECTION TO THIS ARTICLE

An earlier version of this article quoted Harvard School of Public Health cardiologist Dariush Mozaffarian on the benefits of eating salmon, saying that eating "one to serving per day of farm-raised salmon" will help meet the recommendations for consumption of healthful omega-3 fatty acids. That now reads "one to two servings per week."

Benefits of Fish Exceed Risks, Studies Find Experts Advise 2 Servings a Week

By *Sally Squires*

Washington Post Staff Writer

Wednesday, October 18, 2006; Page A14

The health benefits of eating fish regularly outweigh the danger from mercury and other contaminants even for pregnant women and children, two major reports concluded yesterday as scientists tried to resolve a slippery question that has long vexed consumers.

The findings, which were reached by independent teams of scientists, pointed to significant benefits for both young and old. In adults, the death rate from heart disease was 36 percent lower among those who ate fish twice a week compared with those who ate little or no seafood, according to a study being published today in the Journal of the American Medical Association. Overall mortality was 17 percent lower, the study by Harvard School of Public Health researchers found.

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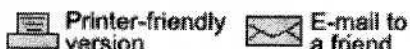

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HealthDay

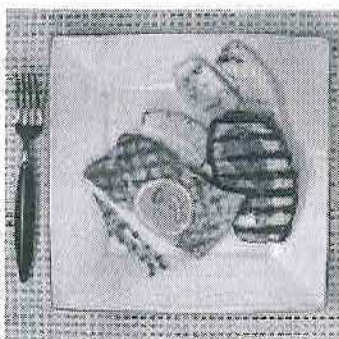
Fish and Fish Oil's Benefits Far Outweigh Risks

Omega-3 protection trumps mercury toxin risk, studies find



HealthDay

Tuesday, October 17, 2006



TUESDAY, Oct. 17 (HealthDay News) -- Americans looking for safe, healthy eating should focus first on fish, according to two government-funded reviews that weighed the pros and cons of eating the finned food.

The verdict: "Fish is likely the single most important food to eat for health, based on the evidence," said the co-author of one of the studies, Dr. Dariush Mozaffarian, an instructor in the department of epidemiology at the Harvard School of Public Health.

That study was funded by the U.S. National Heart, Lung, and Blood Institute, and is published in the Oct. 18 issue of the *Journal of the American Medical Association*.

Mozaffarian said that while a few species do contain worrisome levels of mercury and other contaminants, "when both risks and benefits are considered for the general population, the benefits of fish intake far outweigh the possible risks."

The second major analysis, funded by the Institute of Medicine (IOM), found similar results based on a review of the literature. The IOM panelists agreed that while certain long-lived species may pose a mercury risk to women and young children, fish on the whole is good for Americans. Those results, contained in a report titled *Seafood Choices: Balancing Benefits and Risks*, were announced at a Washington, D.C., news conference on Tuesday.

"Both studies come out with the same conclusion -- seafood is safe and nutritious and Americans should incorporate a variety of seafood in their diets to reduce risk of death from heart disease. In fact, there's a bigger health risk associated with not eating seafood among adults due to coronary heart disease, the primary cause of death among Americans," William T. Hogarth, director of National Marine Fisheries Service, said during the news conference.

One nutrition expert agreed with the findings, especially when it comes to the omega-3 fatty acids found in oily fish such as mackerel, salmon and sardines.

"Omega-3s are, right now, the superstars of the nutrition world," said Katherine Tallmadge, a Washington, D.C., nutritionist who's a spokeswoman for the American Dietetic Association. "There's no question about it -- this is a really critical nutrient that we need, and hardly any Americans are getting enough."

By now, most Americans have heard of the health benefits of omega-3 fatty acids, which are found in greatest abundance in oily, cold-water fish such as herring, mackerel, sardines, salmon and anchovies. There are two main omega-3s -- eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA).

Among other benefits, these compounds are thought to aid in fetal, infant and child neurological development and also protect adults against cholesterol and heart disease.

But oily fish have a darker side. Industrial toxins can make their way into the water supply and end up in concentrated form in the flesh of these fish. Methylmercury, especially, has been linked to developmental problems in newborns and heart, nervous system and kidney damage in adults. For this reason, the U.S. Environmental Protection Agency and the U.S. Food and Drug Administration have each issued warnings about the consumption of a few -- but certainly not all -- fish species by women of childbearing age.

So, is regular fish consumption still good for most people? To find out, Mozaffarian and co-researcher Eric Rimm pored over dozens of studies on the subject conducted up to the spring of this year.

They found that the benefits of fish for heart health far outweighed any risks for the vast majority of consumers. For example, even modest consumption of fish -- one to two servings a week -- cut the overall death risk by 17 percent and deaths from coronary causes by 36 percent, especially if those fish were of the more oily varieties.

Even 250 grams a day of omega-3 fatty acids, considered a relatively low level, were sufficient to start protecting the heart, the researchers said. Ideally, this level of intake could come from just one 6-ounce serving a week of wild salmon or other oily fish. Alternatively, it could come in the form of a fish-oil supplement, the researchers said.

The IOM report agreed with those findings. The agency said it is not yet clear whether the cardiac benefits of fish stem from omega-3 fatty acids, or whether people are simply "substituting the lean protein of seafood for fatty cuts of meat" in their diet.

Caveats remain, however. The Harvard team said that, due to high mercury content, pregnant women or women who believe they could become pregnant are still advised to avoid four fish species: King mackerel (*not* Atlantic mackerel); shark; swordfish; and golden bass (also known as tilefish). The IOM said another species, white albacore tuna, should only be consumed in amounts under 6 ounces per week.

Because omega-3s are so beneficial for the developing fetus, pregnant women are strongly encouraged to eat all *other* fish species, Mozaffarian said.

In its recommendations, the IOM panel also suggested that pregnant women and children under 12 years of age consume up to 12 ounces per week of all seafood species except shark, swordfish, tilefish or king mackerel. They especially recommended those species rich in omega-3 fatty acids.

The IOM report did have its critics, however. One consumer advocacy group questioned the IOM's decision to lump small children in with pregnant women as it drew up its recommendations. "They seem to be unaware that children are smaller than adults," Jean Halloran, director of food safety at Consumers Union, told the *Associated Press*. "That advice, which they featured prominently, could result in young children getting excessive doses of mercury."

Mozaffarian also noted that not all fish dishes are created equal.

"The average fried fish in the U.S. -- a commercially prepared, fried-fish meal -- does not have significant cardiovascular benefit, and may even harm you," he said. The unhealthy oils used in deep-frying appear to cancel out any benefits from the fish, which, in any case, are usually non-fatty species such as cod.

Tallmadge agreed, adding that "canned salmon is probably a nice economical choice," however. "It's usually [caught] wild. The wild salmon is leaner and has proportionally higher levels of omega-3s than farm-bred varieties," she said.

The American Heart Association currently recommends that heart patients take in 1,000 milligrams of omega-3s daily, and healthy individuals consume between 500 and 1,000 milligrams a day. For comparison purposes, Tallmadge noted that a typical 3.5 ounce serving of sardines in sardine oil contains about 3,300 milligrams of omega-3 fatty acids; a similar serving of Atlantic mackerel has 2,500 milligrams; Atlantic herring has 1,600 milligrams; Atlantic salmon, 1,200 milligrams; brook trout, 500 milligrams; and shrimp or flounder, 300 milligrams.

And what about fish-oil supplements? According to Tallmadge, the labeling on many popular supplements can be misleading.

"On the front of the bottle, they'll announce, '1,200 milligrams' of fish oil," she said, "but then when you read the fine print on the back, what's important to look for is the amount of EPA and DHA." Often, that amounts to just 20 or so percent of the pills' volume.

Tallmadge tells her clients to go for an FDA-regulated, prescription omega-3 pill, Omacor (900 milligrams per pill). Then, at least, they know what they're paying for, she said.

HealthDay

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Date last updated: 26 October 2006
