Letters from Mark Hegsted. 2006-2007

My correspondence with Mark Hegsted increased following our interview in October, 2005 at the time of my giving the Joe Stokes Lecture in Boston. He sent a letter in the Fall of 2006 that he said he had been working on, off and on, for some months. His letters were not dated.

Diet Guidelines, Congress, USDA, and NAS

"It provokes me now that I never kept any records or any of my papers or correspondence. I have no recollection of how many House or Senate Committee hearings there were where I testified or just sat in. In one, Jerry Cassidy, one of McGovern's staff who now runs Cassidy and Associates in D.C. told me he had never heard better testimony. So I wish I knew who they were and what I said."

"If the Chairman was sympathetic, we had a good hearing; if not, they practically ignored us. There was one where Phil Handler, Bob Olson, and Alf Harper testified for several hours and then the Chairman said it was getting pretty late so would we keep what we had to say short. We did and that was the end. One of his staff came to apologize and said 'you have to realize that the Senator represents, I think, the Iowa beef producers.' In another hearing the beef producers demanded a hearing right after the Dietary Goals were published. They went on for a few hours about how stupid the goals were without presenting any evidence and so forth. Finally, only Bob Dole of the Committee was left. He stood up and said something like this. 'Look, I've done this, and this is for you. If you think everything I do has to have your approval, I don't know that I want to represent you any more.' That really stopped everything. Too bad that Dole was in the wrong party. Obviously the Dietary Goals were no political advantage for those from the Midwest like McGovern and Dole. In McGovern's autobiography he never mentioned the Goals or the Committee (that is the Senate Committee on Dietary Goals that he headed for several years)."

Diet Guidelines and NIH

Hegsted provides an interesting insight about the role of the Directors of the Heart Institute and NIH in the national diet picture. For example, the following: "Don Fredreickson. (I think it was he who inadvertently produced the job I had at the USDA.) I believe that he testified before the Ag Committee (McGovern Chairman) that he didn't think that NIH or he personally, should take a position on the Dietary Goals: that that might bias their research. I think that upset McGovern or his staff so the Ag bill that year told the USDA to upgrade nutrition to a higher position and specified that the USDA was the agency primarily responsible for nutrition except clinical nutrition. The latter was almost silly, considering the amount of money NIH had in nutrition and [that] USDA had no real viable grant system. However, they did create that administration of human nutrition that I came to head. This was at the third level below the Secretary of Agriculture."

"When it comes right down to it, the USDA has little interest in nutrition, but they have the school lunch fund, and so forth. A lot of money there, so they have to pay attention. But nutrition research, particularly then, was seen as inconsistent with the USDA support of agriculture."

Diet Guidelines and the NAS

And Hegsted gives us insights into how the National Academy of Sciences reacted to the dietary allowances in the New York Times Report dated October, 1985, that the dietary allowance committee recommendations was not accepted by the Academy of Sciences. [This is about the time that work started on the National Academies Report on Diet and Health.] Hegsted says, "I had simply forgotten about it, but after Phil Handler told me that the Food and Nutrition Board would never accept 'that kind of nonsense' he obviously started out to set the record straight. He would appoint a board of people that were already on record of opposing the guidelines and publish the report you called 'a big zero.' Then he appointed a dietary allowance committee headed by Henry Kamin, one of his boys from Duke.

I can remember viewing the report that recommended lowering the allowances of several nutrients and sending in a negative review. It is relevant that Frank Press was President of the Academy. Sounds to me as though there was considerable argument within the Academy, otherwise your [NAS] committee would probably have been under the Food and Nutrition Board if Phil had been President. Or it never would have been appointed. That period between the publication of the Dietary Guidelines and your report (the Diet and Health Report) practically ruined the Academy as a force in nutrition."

He goes on to remark that current dietary reference intakes, the RDA Committee recommendations are so complicated that they are almost useless and that this is unnecessary. "So the Dietary Guidelines become the only useful standard even though we need some kind of standards for the specific nutrients." He goes on to recount that he was given an official demerit in his federal employment for accepting the American Health Foundation Prevention Award during the Reagan administration, even though he had shown the invitation to his superior and had the required approval.

And he had the same problem some of us did being wooed by Ernst Wynder. He couldn't figure out what the job was about and so nothing came of the invitation.

Scott Grundy and Monounsaturates

And he comments on Scott Grundy's research on monounsaturates. "They started out by saying the monos hadn't been studied very much. I thought that was not true considering that what Ancel and we had published. Then they concluded that the monos actively reduced cholesterol level. Again, I think that untrue. However, the real damage of that paper was that the NIH then spent millions supporting work to verify their, that is, the Grundy, conclusion. I don't think a conclusion was ever reached."

This is a very insightful remark. "[I] think there are two possible explanations for their (Grundy's) findings. The first time we fed olive oil we found a lowering almost like corn oil. We fed it six more times and, as did Ancel, found no lowering. My guess is that Proctor and Gamble gave us a high quality oil full of stuff the first time, and then the refined oil later on. We had no records but I expect there are sterols and so forth in the high quality oil that affect cholesterol levels. The other possibility is that they used a cholesterol-free diet. There are not enough data available but there are some that suggest that the response to fats is different with such a diet."

The Keys-Hegsted Debate on Diet Cholesterol Effects

Then he comments on the Keys-Hegsted ancient polemic about their experiments on effects of dietary cholesterol: "While I am it, I would point out that Ancel did a no-no when he added cholesterol to his equation. When you add a new component to a regression equation, it changes the coefficients of the other factors. It would have lowered the coefficient of S since the saturate and cholesterol content of diets is correlated. A great____ of Ancel's equation was that it came out 2 to 1 – easy to remember. Also, although I haven't looked it up, I think we reported later that the best approximation of response to dietary cholesterol is an exponential where it is almost a straight line at lower levels."

George Mann

Then he comments on George Mann: "George Mann was in our department for a while. He was impressed with the stuff someone whose name I can't remember did on lipoproteins. [That must have been Gofman.] So, he was running an ultra centrifuge. After I saw him throw a small beaker at his assistant, I never liked him. When Bill Darby asked me for a letter of recommendation, it was the most difficult I ever wrote. I thought he was smart, but I wouldn't have the ... in my department. I'm not sure what I actually wrote."

On olestra. "We had them here, that is the olestra people, and I recall thinking that the only manufactured product Fred Stare ever opposed was tobacco. Hate to think what would have happened if he had been able to get money from them!"

He closes his 2006 letter with this note. "Finally, I was invited to the University of Iowa or Nebraska or somewhere out there. I was told that the beef people went to the President and objected to my being on the campus. It's always nice to be popular. I have a few others (anecdotes) but this is getting out of hand."

History of the U.S. Dietary Guidelines

I had approached Hegsted about writing a history of the U.S. Dietary Guidelines and he replied in these notes from his February 26, 2007 letter:

"I have actually started a couple of times to try and write the history of the guidelines but I can't do it. I didn't have enough stuff and couldn't spend time in Washington. Some people would have to be interviewed, particularly Carol Foreman. I think they would never have gotten through the Secretary's offices, that is the guidelines, without her, even though Bob Berglund was supported at the end. I remember he asked once 'do you mean everybody (in regard to dietary recommendations)?' I think I tried to explain the so-called prevention paradox."

Fortunately, howver, Mark Hegsted *did* write an extensive and penetrating memo about the evolution of the Dietary Guidelines, and we have it as a pdf document in the website: <u>www.epi.umn.edu/cvdepi</u> (then in the dropdown menu for Essays find: Hegsted on U.S. Dietary Guidelines). Letters exchanged with Mark Hegsted in 2008 having to do with the controlled experiments on diet fats and serum cholesterol changes that he did during the same period as those by Keys, Anderson, and Grande. (Note his highlighted remark about revising his equation on diet cholesterol effects to "exponential" as Keys found)

Dear Henry,

I can't think of anything interesting to tell you about the studies. Bob McGandy was the guy who did most of the work- driving up to Danvers, collecting the blood and food samples, etc. I'm sure he smoothed over some problems but I have no recollection of them. Bob died about 10 years ago. He had a rather sad divorce (4 or 5 kids), became a pathologist, married a Swiss technician who had been in the department and then worked for some Swiss company in Switzerland. Finally came home but developed a cancer. I only saw him once after they came back.

Madge Myers was in charge of diets, Madge lives in Kansas City. She always had a dietician or two plus a couple of cooks. I remember one of the dieticians from New Zealand who was with us for awhile said Madge "Was too much of a lady to do the work." I planned the diets and my lab did the analyses, etc.

The only nice story that may or may not have been in the paper (I think it was) was that after the first 10 months, we shut down for a month or 2 in july and August. The directer of the hospital sent about half of the subjects home as they were greatly improved. That screwed up our design and we assumed we would have to get new subjetcs in the fall. But everyone was back in September. All the attention they got to be sure they ate, stayed in line, etc., was great therapy. Even tho the studies would now be illegal, dietary studies are often great for the subjects. The same was true of our prisoners in Peru. Our studies were the best thing that ever happened to them. Everyone was crying when we closed down the study.

No, Ancel and I never did sit down and discuss the differences. I think I told you that I never knew Ancel well. We moved in different circles. We were told that Ancel opposed our studies originally- already done that.- so I was a little leary of him in the beginning. **The last paper where I** concluded that the cholesterol response was exponential was the last exchange.

Of course, I had some contact with Beveridge, Conner, etc., but I can't think of anything interesting. We saw a lot of Fred Mattson while the studies were going on and they supplied the fats. I guess one of the problems was that I usually went to the FASEB meetings and rarely to the Heart meetings and I was not very much involved in some of the other programs.

I'll be glad to talk to the young man about Guidelines, etc. I won't be very helpful for Ms Tracy.

I'm progressing I guess. At least can still do what I have to do and so far haven't had to have any help. I guess that's all I can expect.

Sometime you sent me some other stuff ; I don't know where it is. But I have a nice picture- "Happy New Year to You" and I could not download some

thing that you said, I think, you got from the Harvard Library. Best Wishes, Mark

--- -- Original Message -----From: "henry blackburn" <<u>black002@umn.edu</u>> To: "Mark Hegsted" <<u>dmhegsted@comcast.net</u>>; <<u>Dmhegsted@aol.com</u>> Sent: Saturday, February 02, 2008 1:19 PM Subject: Hegsted Equation

> Dear Mark: I am hoping your recovery continues and that you are navigating > on your own power. I wonder if I can explore a couple of other issues with > you:

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> My tough editor (wife, Stacy) complains that my short book segment on

> diet-lipid controlled experiments reads like a textbook. We are supposed

 > to be writing a narrative with stories and essays. I am sure I can put
 > together some reminiscences about Ancel and Joe Anderson and Nedra Foster lining up the Schizophrenia wards in the state hospital of Minnesota. But I know
 > nothing of how you conducted your diet-variable experiments, other than
 > what I can find in your articles.

>

> Would it be possible to learn about your facility, subjects, trials and

> tribulations in recruiting, feeding and recording results, who did the

> scut-work, diet formulations, weights and measures, and where, etc. I could > give you a call at your convenience.

>

> Your stuff on the Guidelines is so colorful and interesting, I'd like to
> match it with anecdotes from your experimental undertakings. I have always
> loved, and often used in lectures, the symmetric overlapping bell curves
> of serum cholesterol distributions in your same population on different oil
> diets (somehow prettier than a regression!).

>

> I believe somewhere along the line, you and Ancel worked out your

> differences on diet cholesterol effect. Any anecdotes about Beveridge,

> Mattson, Connor and others' working in the same vein? Ancient history I'm

> interesed in.

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> I'll give you a call if you'll indicate a good day. We write away in

> Florida.

>

> Best regards, Henry

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> PS I hope you will forgive me for giving your address to a young MIT

> historian who seems bright and nice. I should have got your permission.

> He's writing on the background to nutrition labelling, Guidelines, etc. His
> name is Xaq Frohlich <<u>frohlich@MIT.EDU</u>> (I think that's pronounced ZAK).

> I do know that another historian, Sarah Tracy, who is writing a biography

> ofAncel Keys, is interested to talk to you while she's on Sabattical this

> spring at Harvard. I'm sure they will both be respectful of your time and

> interest, or lack thereof. Henry

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