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- As a physician and a toxicologist for more than 40 years, my research has focused on the specific mechanisms by which substances cause cancer and how to assess the risk posed by these chemicals.
- Today, I want to remind the EPA Dioxin Review Panel that, **despite contrary recommendations from the NAS, the EPA continues to use a linear model to calculate the risk of dioxin exposure.** The scientific evidence leads us to the use of a threshold model. **However, I fear that the decision to use linear is driven more by policy and politics than science.**
- As scientists I think we can all agree that we should be letting science lead us to a conclusion on how to assess the risk of dioxin exposure. **Using a linear approach sets a precedent for calculating risk that can lead to fear and confusion about chemicals where there should only be clear science.**
- Using dioxins as an example; following a linear model we are likely to see a great deal of confusion among those of us who practice medicine, teach science and the American public. Given that the goal of a linear model is to get to zero exposure, **the use of such a model will likely lead to a great deal of questions surrounding how to lower exposure to dioxin and what a safe level of exposure actually is.**
- **Since 95% of dioxin comes from food, it is impossible to get to zero exposure as a linear model suggests. However, the only real way to reduce our exposure to dioxins is to dramatically alter our diets.** Some activists groups are getting a head start by calling for dioxin warning labels on meat and dairy products. **These types warnings do very little to benefit public health and can cause more problems than they solve.**
- Take for example the current **FDA warning on fish consumption.** Although well intended, **this warning is the cause of pregnant women being deficient in essential fatty acids that are abundantly found in fish.** An unfounded warning or confusion regarding the consumption of meats and dairy products could lead to a population that will become protein deficient.
- **If we are to avoid animal protein, what do we replace it with?** If Americans are encouraged to stop or reduce consumption of meat and dairy products, we stand to **deter people away from important proteins and encourage greater consumption of carbohydrates which science shows leads to higher rates of obesity and diabetes.**
- **Any government action to lower dioxin exposure should demonstrate a clear benefit to public health.** I ask that the EPA consider how it will advise Americans on how to reduce exposure to dioxins. I also urge the SAB to consider the downstream consequences to the American public when using a linear approach.