

Episode 11 – The 2010 Dietary Guidelines

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► Hi, my name is Mort Satin and I am the Salt Guru. I am also the Vice President of Science and Research at the [Salt Institute](#) in Alexandria Virginia.

Well, after a long wait, in the midst of much hoopla and commentary by a multitude of nutritional talking heads, the [2010 Dietary Guidelines](#) have finally been released. This exercise, which took almost 3 years to complete, has occurred every 5 years since the dietary guidelines were first issued back in 1980. It is supposed to result in a fully objective review of all the recent scientific literature. After all, Public Law 101, Section 301 on the Dietary Guidelines clearly states that “The information and guidelines contained in each report required under paragraph shall be based on the preponderance of the scientific and medical knowledge which is current at the time the report is prepared.”

Yet, in reading the 2010 Dietary Guidelines, I’m not certain that they do meet this stringent criteria. And there are a [great many others who feel](#) the same way, as can be seen from this recent review published in the peer-reviewed journal “Nutrition.”

There are clearly some positive aspects of the 2010 Dietary Guidelines to talk about. In the first instance, I’m pleased that the Dietary Guidelines have finally begun to focus on whole foods and eating patterns rather than isolated nutrients. That is what we eat. Whole foods as part of an integrated diet – not specific nutrients such as proteins, lipids, etc. etc. Deconstructing our foods into specific nutrients that can be prominently displayed on a label – largely to satisfy the demands of certain consumer groups, has probably been the single most important factor in demolishing our food culture. We don’t consume these specific nutrients in isolation, we eat whole foods as part of a whole diet and as part of a whole lifestyle. Is it any wonder that consumers are totally confused and have not the vaguest idea where to turn for advice?

Compare this to the food culture of Italy for example. When you go to the market there, people discuss foods – all kinds of foods such as olives, Parmesan and gorgonzola cheeses, anchovies, capers, prosciutto, salamis and a thousand different sausages – you won’t hear a soul mentioning proteins, or carbohydrates. Italians are into foods, not nutrients – they have a food culture and they also have some of the best health statistics in the world.

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So I am pleased that the Dietary Guidelines are finally focusing on whole foods and eating patterns rather than specific nutrients. It's a pity that it took them 30 years and a public broadcast by the Secretaries of Agriculture and HHS to say what grandma's been saying all along.

I am also pleased that the Dietary Guidelines talk so highly about the Mediterranean eating pattern, which has been responsible for the excellent health statistics in that part of the world. What the Dietary Guidelines do not state, however, is that the [levels of salt consumption in the Mediterranean diet are about 40% higher than in the US diet.](#)

With respect to salt, I am very concerned that the 2010 guidelines, which recommend a level of 1,500 mg sodium per day for more than half the population, will have significant unintended negative health consequences for the nation. This is based upon a review of the peer-reviewed literature that for some reason never made it into the Dietary Guidelines. Someone at the Dietary Guidelines may have been asleep at the switch, because there is no mention at all of these concerns. And if that is the case, we have to think seriously about applying Public Law 101 Section 301!

How about this? A very recent study just came out of [Harvard Medical School that clearly links reduced salt intakes to an increase in insulin resistance](#), the condition that is a precursor to Type 2 Diabetes. The very title of the paper doesn't mince words, "Low-salt diet increases insulin resistance in healthy subjects." A large group of healthy subjects was split into two groups. One group was placed on a low-salt diet and the other on a regular salt diet. The group placed on the low-salt diet developed insulin resistance within 7 days – that's virtually immediately – 7 days! While the group on the regular salt diet remained healthy. Wouldn't you think that such dramatic clinical evidence, coming from such an authoritative source would be seriously considered in making recommendations to the American public? Well, it wasn't. Many nutritionists and physicians have predicted a coming epidemic of diabetes to go along with the epidemic of obesity. According to this latest evidence, the recommended reduction in salt will only exacerbate this development.

And speaking of the obesity epidemic, most nutritionists at last year's annual meeting of the American Society of Nutrition agreed that the reduced salt Guidelines will worsen, not improve, the ongoing obesity crisis because people will consume more calories just to satisfy their innate salt appetite. We have decades of animal feeding experience as a foundation for this statement.

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And if there are any skeptics still out there, we have a great many similar examples. When 'light' beer was produced, people drank far more of it; when we cut the sugar out of soft drinks, people swilled enormous quantities of low-cal beverages; when we cut the fat out of foods, people gorged themselves on low-fat, no-fat foods to such an extent that they ushered in the current obesity epidemic.

Now seriously, what do you think someone will do if they are faced with a huge bag of low-salt potato chips? Seriously.

While I applaud those who wish to improve the diet, I have to stress that doing so is not simply a matter of good intentions, it's a matter of science and once we abandon science, we descend into ideology. Human physiology answers to a much higher authority than the Dietary Guidelines.

The concern for sodium is based upon the proposed connection between salt consumption and hypertension – an issue which has been hotly debated for the last 30 years. For every study that claims a benefit for salt reduction, another study refutes it. So at the very minimum, the jury is out on the benefits of salt reduction. But what actually are the benefits that are claimed for salt reduction?

Well, the clinical evidence for salt-sensitive people indicates that they will [experience a 2 – 6 mm drop in their systolic](#) pressure. That's it – a maximum of a 2 – 6 mm drop if you are salt sensitive and cut out 2/3 of your salt.

Well what does that mean? It means that if you are hypertensive and taking blood pressure medicine, you had better continue taking it, because a 2 – 6 mm drop will still leave you with hypertension. Dropping that great amount of salt may reduce blood pressure for certain individuals, but the reduction is not even close to what you have been led to believe.

And even that connection has been disputed recently in another [study out of Harvard](#). This study demonstrates that while hypertension has increased among Americans over the last 40 years, sodium or salt consumption has remained virtually unchanged. These findings totally contradict the urban myth that assumes increasing salt intake is the main driver in population-wide increase in hypertension. If, over the last four decades, high blood pressure increased significantly but salt consumption did not, then the two are not related. Since the primary reason for placing limits on salt was the purported link to hypertension, the exclusion of this most recent study makes it clear that the Dietary Guidelines regarding salt are far more a product of ideology rather than of science.

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Among the studies totally ignored by the Dietary Guidelines were those that linked lowered salt intakes to [low-birth weights in children](#). Studies that showed [cognitive impairment](#) in children. Why were these studies never considered?

What about those peer-reviewed studies that demonstrated greatly increased [rate of falls](#) and [fractures among the elderly](#)? It is a standard practice in assisted living facilities to place all residents on low-salt diets – do you know that the rate of falls and fractures in these assisted living facilities are [three times as great as in the normal home](#) environment. Low salt diets have to be considered very carefully.

There has been a multiplicity of conditions and risks recently ([1](#), [2](#), [3](#), [4](#)) described in the peer-reviewed medical literature that have been associated with reducing salt in the diet. To what extent have these been taken into account by the Dietary Guidelines? Will the 2010 Dietary Guideline pass the Public Law 101 Section 301 litmus test?

Further reducing the salt in our diets will have a negative effect on our dietary choices. You can see on the [chart that the overall burden on disease](#) across all countries in Europe is directly related to the availability of salads, fruits and vegetables. As people consume more of these items their diseases diminish. We know that the dark green vegetables contain very healthy, but bitter phytochemicals - broccoli is a perfect example. [Reducing salt intake made these foods less appealing and as a result adversely affects their nutrient intake](#). It is the salt that makes these food items more palatable – if not, they taste like grass. Reducing salt will reduce the consumption of some of our most nutritious foods

The fact is that there is not a single long-term scientific study demonstrating that population-wide sodium reduction will lead to better overall health. This study, carried out for the [German Ministry of Health](#) said just that.

On the contrary, as you have just seen, there is considerable peer-reviewed clinical research that predicts several negative consequences, across all age groups. In fact, that is why the Salt Institute has, for many years, been the only organization in the country that has repeatedly asked the Secretary of Health and Human Services to support a large clinical trial that would show the health outcomes resulting from population-wide salt reduction. This request, which was always made without any pre-conditions, has always been refused.

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We are now eating less salt than we ever have. Up until the end of the Second World War, salt was the primary means of food preservation. Beginning in the 1950s, refrigeration took over that function and out salt consumption dropped dramatically.

But now, the 2010 Dietary Guidelines are recommending a level of salt far lower than can be found in any other country in the world and lower than in any period in recorded history. This effectively places the entire population into a massive clinical trial without our knowledge and certainly without our consent.

So there they are, the 2010 Dietary Guidelines on salt - drastic, simplistic and unrealistic - far more a product of ideology than of science.

Following them will place us in peril.

Until next time, this is the Salt Guru saying "bye for now." ◀

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