Adverse Cardiac Effects of Salt With Fludrocortisone in Hypertension

To the Editor:
I’ve just read your recently published study “Adverse Cardiac Effects of Salt With Fludrocortisone in Hypertension.” I wondered if any of the hypertension studies take into account the differences between refined salt and minimally processed sea salts. I can understand that the refined salts are ubiquitous and therefore require the predominant attentions, but I have a feeling that before too long, refined salt may go the way of such food products as trans-fats.

It’s my understanding that whole sea salts are quite rich in balancing minerals such as calcium, magnesium, and potassium. In fact, it has ~90 different minerals and trace elements compared with table salt, which has 2, sodium and chloride (not including anticaking agents and sometimes iodine). Some whole sea salts have as little as 74% sodium chloride compared with the ~99% sodium chloride of table salt.

The studies performed with the highly refined salt are using something that does not really exist in nature, although it has become the “norm” in food preparation and seasoning. Sea salt and mined salts have to be highly refined to become that which we have come to call table salt. (Some of the byproducts of salt refining are “more valuable” as industrial components such as rocket fuel.) The refining of salt has a relatively short history, and the change over to this highly refined product may be responsible for many diseases that result from the modern diet.

Sea salt also has the distinct advantage of tasting a whole lot better than table salt, which tends to taste caustic. The best kind is still moist and has an off-white to gray color. Sea salts that have been refined and overwashed lose a lot of the beneficial minerals and elements and when dried lose their natural iodine. (If you live in landlocked areas, iodine from sea salt is recommended, but coastal dwellers are sometimes discouraged from using regular iodized salt as they get all they need from the airborne trace element.)

As you can see, I’ve put some thought into this and, time allowing, would be glad to share more information with interested parties. Please feel free to contact me via e-mail at rtico@aol.com.

Robert Holland
New York, New York

Response
There are currently little data on the differential cardiovascular effects of refined and nonrefined salts or on how the different minerals in nonrefined salts biologically interact when ingested. There is, however, evidence from animal experiments suggesting that the refined salt is more hypertensionogenic. Nevertheless, it is likely that excess salt intake, whether refined or not, will do more harm than good, but the interesting questions raised by Mr Holland deserved attention.

Pitt O. Lim
British Heart Foundation Clinical Lecturer in Cardiology
Department of Cardiology
Wales Heart Research Institute
University of Wales College of Medicine
Heath Park, Cardiff, United Kingdom

Adverse Cardiac Effects of Salt With Fludrocortisone in Hypertension
Robert Holland

Hypertension. 2001;38:e25
Hypertension is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2001 American Heart Association, Inc. All rights reserved.
Print ISSN: 0194-911X. Online ISSN: 1524-4563

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://hyper.ahajournals.org/content/38/4/e25

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in Hypertension can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at:
http://www.lww.com/reprints

Subscriptions: Information about subscribing to Hypertension is online at:
http://hyper.ahajournals.org/subscriptions/