Moderate dietary salt reduction in populations

Francesco Cappuccio

Department of Warwick Medical School, University of Warwick, U.K.

Current salt consumption in human societies is now much greater than needed for survival. Furthermore, high salt intake substantially increases blood pressure (BP) in both animals and humans. Conversely, a reduction in salt intake causes a dose-dependent reduction in BP in men and women of all ages and ethnic groups, and in patients already on medication. The risk of strokes and heart attacks rises with increasing BP, but can be decreased by anti-hypertensive drugs. However, the majority of cardiovascular disease (CVD) events occur in the numerous individuals with 'normal' BP levels below the 'clinically hypertensive' level which might trigger drug therapy.

Non-pharmacological prevention is therefore the only option to reduce the majority of such events. Reductions in population salt intake consistently reduce the number of subsequent CVD events (with additional benefits for the heart, kidneys, stomach and skeleton). Indeed, this is one of the most important public health measures for reducing the global CVD burden.

The most successful policies involve comprehensive programmes which ideally include population monitoring, health education and reformulation to reduce the salt content concealed in processed foods (which represent over 75% of daily salt intake). Such population-wide salt reduction policies are generally powerful, rapid, equitable and cost saving.

Inevitably, the food and beverage industries, which profit from marketing salt will try and oppose such policies in many different ways. However, public health has succeeded in countries that considered the necessary levers: regulation, legislation and, at times, taxation.