Diets high in sodium (mostly from salt) are a major cause of high blood pressure in the United States and many other countries. And hypertension is a major cause of heart attacks and strokes. Because three-fourths of the sodium comes from packaged and restaurant foods, the Institute of Medicine, World Health Organization, and others have called for voluntary and mandatory reductions in the sodium content of those foods. Some countries are addressing the issue by mounting mandatory programs or overseeing voluntary programs to reduce sodium, but the United States Food and Drug Administration has not undertaken any such program. Because cutting sodium consumption by half would save about 100,000 lives per year, the FDA is missing perhaps its greatest opportunity to promote the public’s health. This document provides an overview of sodium-reduction programs around the world.

Argentina
In 2011, Argentina established a voluntary initiative called Less Salt, More Life. The initiative includes voluntary agreements with major food manufacturers to progressively reduce salt content in processed foods. It aims to reduce salt by 5 to 18 percent in meat, cheese, and soup, and by 25 percent in bread by 2015. To date, 20 food companies have signed the agreement, including Nestle, Kraft Foods, and Bimbo. A government-run monitoring plan tracks industry progress through laboratory testing of food products and measures societal impact through sodium-intake surveys and urine analyses.1 The Director of Health Promotion for Argentina’s Ministry of Health has praised the progress achieved through the program, stating that the voluntary agreements to reduce sodium in processed foods have advanced with great success.2

In November 2013, Argentina made sodium reductions mandatory with legislation that set maximum sodium limits for 18 categories of meats, bread products, and soups to be achieved by 2015. For example, the legislation limits sodium in hamburger meat to 850 mg per 100 grams, and sodium in instant soups must be no higher than 352 mg per 100 grams.3 Companies have 18 months to comply with the new regulations or they face strict penalties, including fines of up to 1 million pesos and suspension of business operation for one to five years. The legislation also requires health messages on restaurant menus that warn about the risks of excessive salt consumption and sets a maximum size for containers in which salt can be sold.4

Australia
In 2009, the Australian government established the Food and Health Dialogue, a voluntary program that created 20 sodium-reduction targets in nine food categories: breads, breakfast cereals, simmer sauces, soups, processed meats, savory pies, potato chips/extruded snacks, savory crackers, and cheese. Participating companies determine individually which products to reformulate and the amount of sodium to be reduced per year to reach the final target. Progress is monitored by the Australian Department of Health through regular updates by participating companies on their activities.5

To date, more than 35 companies have agreed to voluntary reductions, including the Australian subsidiaries of Kraft Foods, PepsiCo, Mars, and Nestle. A 2014 study found that from 2010 to 2013 the average sodium level in bread products was reduced by 9 percent, breakfast cereals by 25 percent, and cured meats by 8 percent.6

Austria
In 2010, Austria started the Less Salt is Healthier initiative, a voluntary agreement between Austrian bakeries, the Ministry of Health, and Austrian Economic Chambers, to reduce the salt content of bread products by 15 percent by 2015. Participating companies are allowed to use a health label on their products that states “Less Salt is Healthier.”7 To date, around 220 companies representing 30 percent of the Austrian market have joined the initiative. In February of 2013, the Austrian Federal Ministry of Health stated that the initiative had removed 30 tons of salt from bread and pastries.
Belgium
In 2009, the Federal Public Health Service set voluntary reduction benchmarks for 13 food categories with the goal of reducing salt intake by 10 percent by 2012. Targets were set for meats, cheese, ready meals, soups, breakfast cereals, fish products, chips, catering meals, restaurant meals, sauces, condiments, potato products, and canned vegetables. According to a September 2013 announcement, the plan has resulted in salt reductions in meat products (16 to 36 percent), bread (22 percent), dehydrated soups (17 percent), and cheese (7.5 to 20 percent). A 1985 regulation set the maximum level of sodium content in Belgian-made bread at 1.2 grams per 100 grams of bread.

Brazil
In 2011, the Ministry of Health signed a voluntary agreement with the Brazilian Association of Food Industries, the Brazilian Association of Pasta Manufacturers, the Brazilian Wheat Association, and the Brazilian Association of the Bakery and Confectionery Industries to reduce sodium content across 16 food categories. The reduction targets range from 2.5 percent to 19.5 percent depending on the food category. Full implementation is set for 2020 with interim targets in the preceding years. Progress will be monitored by the Ministry of Health through industry self-reporting and confirmed through laboratory testing by the National Health Surveillance Agency.

Bulgaria
In 2012, Bulgaria created mandatory salt limits for breads, cheese, meat and poultry products, and lutenica (a vegetable relish product). Breads, for example, must contain 1.2 grams of salt per 100 grams of bread or less.

Canada
In 2010, Canada released its Sodium Reduction Strategy, which aims to reduce average sodium consumption from 3,400 to 2,300 mg per day by 2016. Canada is pursuing a three-pronged strategy to reduce consumption: (1) voluntary reductions by industry based on governmental guidance, (2) consumer education and awareness, and (3) research.

In response to a lack of industry action and transparency in voluntary efforts, legislation was proposed in 2013 that would have mandated many of the voluntary recommendations that were made in the Sodium Reduction Strategy. The bill was defeated in Parliament. Canada continues to rely on voluntary industry efforts and self-reporting for sodium reductions.

Chile
In 2012, Chile’s Ministry of Health entered a voluntary agreement with the Chilean Federation of Industrial Bakers and the Chilean Association of Supermarkets to reduce sodium in bread by 25 percent by 2014. Participating bakeries and bread producers will receive a seal of distinction for their efforts.

In the same year, Chile passed the Law of Food Labeling and Advertising, which, once finalized, will require food products to display a warning label indicating that the product is “excessive in sodium” if the sodium level is above the Ministry of Health’s limit (yet to be determined).

Czech Republic
In 2008, companies in the Federation of Food and Drink Industries (FFDI) voluntarily committed to reduce sodium in dried soups and sauces between 2011 and 2014. The commitment included voluntary labeling of sodium content and other nutrition information on processed food products.
Finland
In 1979, Finland launched its first salt-reduction campaign as part of a comprehensive strategy to lower the incidence of cardiovascular disease. Since the late 1990s, Finland has required “high salt” warning labels to be displayed on high-sodium foods, such as bread (>1.3 percent salt), sausages (>1.8 percent salt), and cheese (>1.4 percent salt). To avoid the high-salt warning label, companies have worked to reformulate products, and as a result the average sodium content in food products has decreased by 20 to 25 percent.

In 2009, the threshold for qualifying as a high-salt product was further lowered to spur an additional 5 to 15 percent reduction through voluntary efforts. Products that meet low-salt guidelines can use a government-approved heart symbol in their packaging and advertising. In 2009, Finland also set a maximum salt limit for products eligible for EU subsidies. As of 2011, salt limits are a part of the eligibility criteria for university meals to receive subsidies.

Finland’s comprehensive approach has resulted in a one-third reduction in average sodium intake between 1980 and 2002 and, together with other measures, has contributed to a 75 percent decrease in both stroke and coronary heart disease mortality.

Greece
Since 1971, the Food and Drinks Code of Greece has limited the salt content in bread (1.7 percent salt by dry weight) and tomato products like juice, concentrate, and paste.

Hungary
In 2011, Hungary passed the Public Health Product Tax Act which levies a 5-cent tax on foods with high sodium content. The tax applies to snacks with more than 1 gram of salt per 100 grams of product and to condiments with more than 5 grams of salt per 100 grams of product. The Codex Alimentarius Hungaricus, which regulates foods sold in Hungary, was also updated in 2012 to include stricter sodium limits on bread and bakery products. In the same year, more than 1,500 bakers signed a contract with the National Institute for Food and Nutrition Science to reduce the salt content of bread by 16 percent by 2017.

Ireland
In 2003, the Food Safety Authority of Ireland (FSAI) started the Sodium Reduction Programme to lower sodium consumption through voluntary industry efforts. As of 2012, the voluntary program involved 58 companies and trade associations that were working to reduce salt content in key food categories including meat products, bread, breakfast cereals, soup, and dairy products. As a result of the program, sodium levels have dropped in many food categories, including an 18 percent decrease in bread between 2003 and 2011, and average daily salt intake per person from processed food has decreased by 1.1 grams per day. The ultimate goal of the program is an average salt intake of less than 6 grams per day (2,400 mg of sodium).

Latvia
In 2012, Latvia mandated dietary standards in schools, kindergartens, long-term social care institutions, and hospitals. Processed meat and fish products such as sausages; frankfurters; dried, smoked, salted meat and fish products; and frozen fish fingers are allowed to be served once a week if they contain at least 70 percent meat or 60 percent fish, and less than 1.25 g of salt per 100 g of meat product and 1.5 g per 100 g of fish product. The amount of salt allowed in prepared meals is also limited.
Mexico
In 2012, the Mexican National Chamber of the Bread Industry (CANAINPA), the Mexican National Association of Supermarkets and Department Stores (ANTAD), and Grupo Bimbo (the largest Mexican-owned baking company) signed a voluntary agreement with the Health Department of Mexico to reduce sodium in their bread products by 10 percent by 2017.29

The Netherlands
In 2009, The Netherlands passed legislation that set a limit on salt content in bread and flour. The legislation was revised in 2013 to further reduce salt content in those products.30 The maximum salt content for bread is currently 1.8 percent salt by dry volume. For flour, the maximum amount is 1.5 percent salt by dry volume.31

In addition to legislation, the Dutch Food Industry Federation (FNLI) formed a salt taskforce that committed to an average salt reduction of 12 percent across all product categories between 2008 and 2010. A 2012 FNLI press release stated that the food industry achieved a 10 percent reduction in salt by the 2010 deadline.32 Despite falling short of the original target, the task force plans to achieve additional voluntary reduction targets by 2015. As of 2012, 56 companies were involved in the initiative with varied targets.33

New Zealand
In 2010, the New Zealand Ministry of Health initiated Project HeartSAFE, a voluntary, industry-led effort to reduce sodium content across various product categories. To date, the project has established “best practice guidelines” that outline maximum sodium level targets for bread, breakfast cereals, soups, processed meats, and savory pies, and provide proposed implementation timelines culminating in 2016.34

Paraguay
In 2013, the Minister of Health enacted a resolution that mandated a 25 percent sodium reduction in bread, the main source of salt in the Paraguayan diet.35

Portugal
In 2009, Portugal passed legislation that limited the salt content in bread to 1.4 grams per 100 grams of bread. However, recognized traditional bread products are exempt from the law. Noncompliance is punishable by fines of up to 5,000 Euros.36

Romania
A 2008 ministerial order set sodium limits for foods sold in schools: 1.5 grams of salt per 100 grams of product.37,38

South Africa
In 2013, South Africa enacted regulations that set mandatory limits on sodium in bread, cereal, butter and spreads, savory snacks, potato chips, cured processed meats, and sausages. The sodium targets are to be achieved through a stepped implementation approach, with the intermediate target to be met by 2016 and the final target by 2019. Among the targets, sodium will be reduced from 2010 levels in bread by 28 percent, cereals by 37 percent, and cured meats by 46 percent.39
South Korea
In 2012, the Ministry of Food and Drug Safety started the Korea Center for Less Salt Campaign to spur voluntary industry action on sodium reduction. The campaign seeks to reduce sodium consumption by 20 percent by 2017 from a 2010 baseline. In 2013, 13 food manufacturers voluntarily produced or reformulated 87 processed food products with lower sodium content, and some large supermarkets also provided separate sections for the sale of lower-sodium products.40

Thailand
In 2004, Thailand started the Thai Food, Good Heart project that allows industry to use a health label on processed food products that meet certain salt standards.41

Turkey
In 2011, the Turkish government began its Comprehensive Salt Reduction Program. Through the program, Turkey has set limits on sodium in bread and some processed foods like tomato paste, and banned the sale of chips in school cafeterias.42

United Kingdom
After years of discussion beginning in 2003, the United Kingdom Food Standards Agency (FSA) published its first set of voluntary salt-reduction targets in 2006. Those targets applied to 85 food categories that provide the majority of sodium in the British diet, including processed meats, bread, cheese, convenience foods, and snacks.43 In 2008, the FSA set more ambitious targets to be achieved by 2012. While results have varied by product, sodium levels in many target foods have been reduced significantly, some by 40 to 50 percent or more. Between 2001 and 2011, average British per capita daily sodium consumption dropped by 560 mg (15 percent).44 A contributing factor to salt reduction was a voluntary traffic-light food-labeling system, present on more than 75 percent of foods sold in the UK. The FSA has set further reduction targets for 2017.45

Other countries with government-led voluntary sodium reduction initiatives:46,47,48,49,50
• Barbados
• China
• Colombia
• Costa Rica
• Croatia
• Cuba
• Cyprus
• Denmark
• Dominican Republic
• Ecuador
• Estonia
• France
• Guatemala
• India
• Indonesia
• Israel
• Italy
• Japan
• Malaysia
• Malta
• Montenegro
• Philippines
• Singapore
• Slovakia
• Slovenia
• Spain
• Suriname
• Sweden
• Switzerland
• Uruguay
International Action on Sodium

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