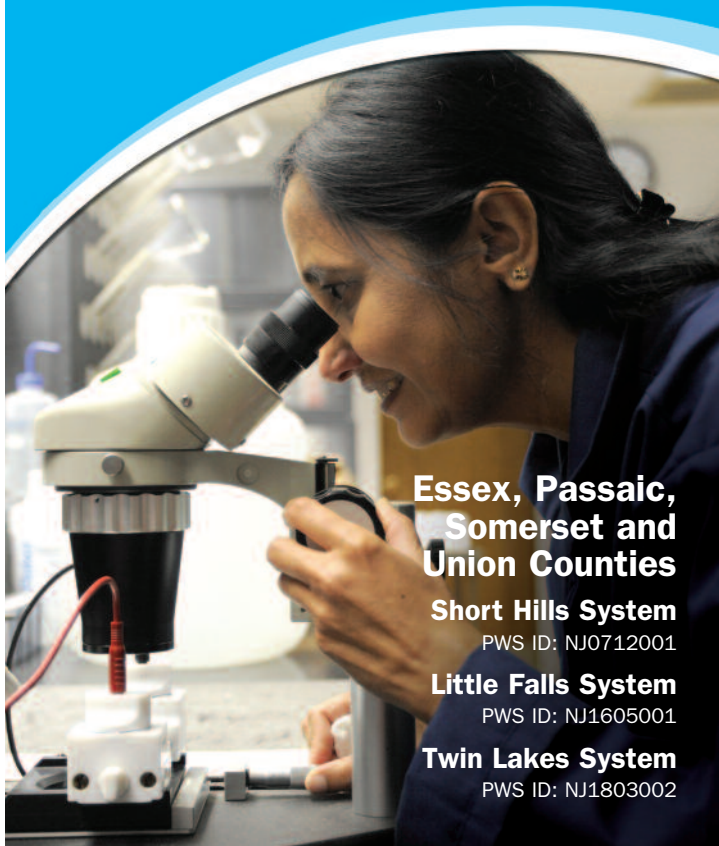


2011 Annual Water Quality Report



**Essex, Passaic,
Somerset and
Union Counties**

Short Hills System
PWS ID: NJ0712001

Little Falls System
PWS ID: NJ1605001

Twin Lakes System
PWS ID: NJ1803002

**This report contains important information about your drinking water.
If you do not understand it, please have someone translate it for you.**

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

本报告与您的饮用水有关。
如果您不了解其内容，应请别人为您翻译解说。

이 보고서에는 귀하께서 사용하고 계시는 식수에 관한 정보가 들어있습니다.
만약에 이해를 못하시면 누군가에게 번역을 의뢰하십시오.

આ અહેવાલ મારી પીવાના પાણી વિષે
અગત્ય ની જાણકારી આપવા માં આવી છે.
અને તે અનુભવ કરી શકવા જેને સમજવા પડતી
ભાષા તેના સાથે આપ કરી



A Message from the New Jersey American Water President

To Our Valued Customer:

New Jersey American Water is proud to be your local water service provider, and I am pleased to share with you good news about the quality of your drinking water. Each year, we provide you with our Annual Water Quality Report – and like so many years prior – you'll find that we continue to supply water that meets or surpasses all state and federal water quality regulations.

This doesn't happen by chance. It requires having the right team of experts and technologies in place. Delivering high-quality, reliable water service to your tap around the clock also requires significant investment in our water infrastructure. In 2011 alone, we invested more than \$182 million in water system improvements statewide. From upgrading our treatment facilities to replacing aging water pipelines, we invest prudently and with purpose. And, because we invest our dollars responsibly, we provide our water for less than a penny per gallon—an exceptional value for a service that is so essential to our daily lives.

We hope you agree; it's worth every penny and worth learning more about. Please, take the time to review this report. It provides details about the source and quality of your drinking water using the data from water quality testing conducted for your local water system from January through December 2011. For an electronic copy of this report, visit us online at www.newjerseyamwater.com.

At New Jersey American Water, our customers are our top priority, and we are committed to providing you with the highest quality drinking water and service possible now and in the years to come.

Sincerely,

David Baker
President, New Jersey American Water

About New Jersey American Water

New Jersey American Water, a wholly owned subsidiary of American Water (NYSE: AWK), is the largest investor-owned water utility in the state, providing high-quality and reliable water and/or wastewater services to approximately 2.5 million people.

About American Water

Founded in 1886, American Water is the largest investor-owned U.S. water and wastewater utility company. With headquarters in Voorhees, N.J., the company employs approximately 7,000 dedicated professionals who provide drinking water, wastewater and other related services to approximately 15 million people in more than 30 states, as well as parts of Canada. More information can be found by visiting www.amwater.com.

What is Radon?

Radon is a radioactive gas that occurs naturally in some groundwater. It may pose a health risk when the gas is released from water into air, as occurs while showering, washing dishes and performing other household activities. Radon can move up through the ground and into a home through cracks in the foundation. Compared to radon entering the home through soil, radon entering through tap water is, in most cases, a small source of radon in indoor air. Inhalation of radon gas has been linked to lung cancer, however the effects of radon ingested in drinking water are not yet clear. If you are concerned about radon in your home, tests are available to determine the total exposure level.

New Jersey American Water conducts annual sampling to determine the radon levels in all sources of supply. Our water showed radon levels ranging from ND to 1654 pCi/L in the Short Hills system and at 6669 pCi/L in the Twin Lakes system. Radon was not detected in the Little Falls system. The EPA is developing regulations to reduce radon in drinking water. Radon in the air is inexpensive to test and easy to correct. For additional information, call the EPA's Radon Hotline at 1-800-SOS-RADON.

Lead Education Statement

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. New Jersey American Water is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Unregulated Contaminant Monitoring Rule (UCMR)

New Jersey American Water participated in the Unregulated Contaminant Monitoring Rule. Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA and DEP in determining the occurrence of unregulated contaminants in drinking water and whether regulation is warranted. Our results are available upon request. For testing conducted in the Short Hills system, we found the substances listed.

How to Contact Us

Thank you... for allowing us to continue to provide you with quality drinking water this year. We ask that all our customers protect our water sources. Please call our Customer Call Center toll-free at 1-800-652-6987 if you have questions.

New Jersey American Water
131 Woodcrest Road
P.O. Box 5079
Cherry Hill, NJ 08034
www.amwater.com

Share This Report:

Landlords, businesses, schools, hospitals and other groups are encouraged to share this important water quality information with water users at their location who are not customers. Additional copies of this report are available by contacting customer service at 1-800-652-6987.

Water Information Sources

- **New Jersey Department of Environmental Protection Bureau of Safe Drinking Water:** (609) 292-5550 · www.state.nj.us/dep
- **New Jersey Board of Public Utilities:** (973) 648-2350
Two Gateway Center, Newark, NJ 07102
Division of Customer Relations:
1-800-624-0241 · www.state.nj.us/bpu
- **US Environmental Protection Agency:** www.epa.gov/safewater
- **Safe Drinking Water Hotline:** 1-800-426-4791
- **American Water Works Association:** www.awwa.org
- **Centers for Disease Control and Prevention:** www.cdc.gov

What's in the Source Water Before We Treat It?

In general, the sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals or from human activities.

Substances That May Be Present in Source Water Include:

Microbiological Contaminants: such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations or wildlife.

Inorganic Contaminants: such as salts and metals which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and Herbicides: which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.

Organic Chemical Contaminants: including synthetic and volatile organic chemicals which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff and septic systems.

Radioactive Contaminants: which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

LESS THAN A PENNY A GALLON
That's an exceptional value.

Do I Need to Take Special Precautions?

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Public Participation

How You Can Get Involved

Customers can participate in decisions that may affect the quality of water by:

- Reading the information provided in bill inserts and special mailings
- Contacting the company directly with questions or to discuss issues
- Responding to company requests for participation in focus groups and roundtables
- Attending open houses conducted by the company
- Responding to survey requests

How Do I Read the Table of Detected Contaminants?

First, determine which table you should read by finding your town in the Towns Served by this System. Starting with the **Contaminant**, read across from left to right. A "Yes" under **Compliance Achieved** means the amount of the substance met government requirements. The column marked **MCLG, Maximum Contaminant Level Goal**, is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety. The shaded column marked **MCL, Maximum Contaminant Level**, is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. The shaded column marked **Range Detected** shows the highest and lowest test results for the year. The column marked **Highest Level Detected** shows the highest test results during the year. **Typical Source** shows where this substance usually originates. Compare the Range Detected values with the MCL column. To be in compliance, the Highest Level Detected must be lower than the MCL standard. Those substances not listed in the table were not found in the treated water supply.

As you can see from the table, our system had no MCL violations again this year. The footnotes and the definitions below will help you interpret the data presented in the Table of Detected Contaminants.

Table Definitions

90th Percentile Value: Of the samples taken, 90% of the values of the results were below the level indicated in the table.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MRDL (Maximum Residual Disinfectant Level): The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

NA: Not applicable

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of the water.

ND (None Detected): Laboratory analysis indicates that the constituent is not present.

ppb (Parts per Billion): Corresponds to one part substance in one billion parts of water.

ppm (Parts per Million): Corresponds to one part substance in one million parts of water.

ppt (Parts per Trillion): Corresponds to one part substance in one trillion parts of water.

pCi/L (Picocuries per Liter): A measure of the radioactivity in water.

RUL: Recommended upper limit

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

Water Quality Statement

The data presented in the Table of Detected Contaminants is the same data collected to comply with U.S. Environmental Protection Agency and New Jersey state monitoring and testing requirements. We have learned through our testing that some contaminants have been detected, however, these contaminants were detected well below the levels set by the EPA to protect public health. To assure high quality water, individual water samples are taken each year for chemical, physical and microbiological tests. Tests are done on water taken at the source, from the distribution system after treatment and, for lead and copper monitoring, from the customer's tap. Testing can pinpoint a potential problem so that preventative action may be taken. The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals, and synthetic organic chemicals. Our system has received monitoring waivers for synthetic organic chemicals and asbestos.

Vulnerable Populations Statement

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial pathogens are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Twin Lakes System - PWS ID# NJ1803002

Table of Detected Contaminants - 2011

Towns Served By This System: | Twin Lakes Association (Bernardsville)

Those substances not listed in this table were not found in the treated water supply.

Regulated Substances							
Contaminant	Unit	MCL	MCLG	Range Detected	Highest Detected Level	Compliance Achieved	Typical Source
Disinfectant By-products							
Total Trihalomethanes (TTHM)	ppb	80	NA	ND - 6.4	3 ¹	Yes	By-product of drinking water disinfection
Five Haloacetic Acids (HAA5)	ppb	60	NA	ND - 1.1	1 ¹	Yes	By-product of drinking water disinfection
Disinfectants							
Chlorine	ppm	MRDL = 4	MRDLG = 4	0.49 - 0.73	0.81 ²	Yes	Water additive used to control microbes
Inorganic Contaminants							
Barium	ppm	2	2	NA	0.02	Yes	Erosion of natural deposits
Fluoride	ppm	4.0	4.0	NA	0.1	Yes	Erosion of natural deposits
Nickel	ppb	NA	NA	NA	4.9	NA	Erosion of natural deposits
Nitrate	ppm	10	10	3.06 - 4.21	4.21	Yes	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Radiological Contaminants							
Alpha emitters ³	pCi/L	15	0	0.87 - 3.3	3.3 ¹	Yes	Erosion of natural deposits
Combined Radium ³	pCi/L	5	0	NA	0.48 ¹	Yes	Erosion of natural deposits
Tap water samples were collected for lead and copper analysis from homes in the service area							
Contaminant	Unit	Action Level	MCLG	Amount Detected (90th Percentile)	Compliance Achieved	Number of Samples Above Action Level	Typical Source
Lead ³	ppb	15	0	3	Yes	1	Corrosion of household plumbing systems
Copper ³	ppm	1.3	1.3	0.83	Yes	0	Corrosion of household plumbing systems; Erosion of natural deposits

¹ This level represents an annual average of all samples.

² Highest Detected Level is the maximum monthly average detected at the point of entry. Range indicates the average values detected in the distribution system.

³ The state of New Jersey allows us to monitor for some substances less than once per year because the concentrations of these substances do not change frequently. Some of our data, though representative, is more than one year old.

Short Hills System - PWS ID# NJ0712001

Table of Detected Contaminants - 2011

Towns Served By This System: | Bedminster | Berkeley Heights | Bernards (Basking Ridge) | Bernardsville | Chatham Borough | Chatham Township | Chester Borough | East Hanover Far Hills | Florham Park | Harding | Hillside | Irvington | Livingston | Long Hill Township (Gillette, Millington, Stirling) | Madison | Maplewood | Mendham Borough Mendham Township | Millburn (Short Hills) | Morris | New Providence | Roseland | South Orange | Springfield | Summit | Union | Verona | Warren | Watchung | West Orange
Those substances not listed in this table were not found in the treated water supply.

Regulated Substances							
Contaminant	Unit	MCL	MCLG	Range Detected	Highest Detected Level	Compliance Achieved	Typical Source
Disinfectant By-products							
Total Trihalomethanes (TTHM)	ppb	80	NA	0.6 - 135	33 ^{1,2}	Yes	By-product of drinking water disinfection
Five Haloacetic Acids (HAA5)	ppb	60	NA	ND - 91.7	20 ¹	Yes	By-product of drinking water disinfection
Disinfectants							
Chlorine	ppm	MRDL = 4	MRDLG = 4	0.41 - 0.67	0.56 ³	Yes	Water additive used to control microbes
Chloramine	ppm	MRDL = 4	MRDLG = 4	0.6 - 1.1	1.1 ³	Yes	Water additive used to control microbes
Inorganic Contaminants							
Arsenic	ppb	5	0	ND - 1	1	Yes	Erosion of natural deposits
Barium	ppm	2	2	ND - 0.208	0.208	Yes	Erosion of natural deposits
Fluoride ⁴	ppm	4	4	ND - 1.2	1.2	Yes	Erosion of natural deposits; Water additive which promotes strong teeth
Nickel	ppb	NA	NA	ND - 14.9	14.9	NA	Erosion of natural deposits
Nitrate	ppm	10	10	0.01 - 3.96	3.96	Yes	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium	ppb	50	50	ND - 0.65	0.65	Yes	Erosion of natural deposits
Microbiological Contaminants							
Total Coliform Bacteria	Percent of positive samples	5%	0	ND - 0.6%	0.6%	Yes	Naturally present in the environment
Treatment By-products Precursor Removal							
Total Organic Carbon	ppm	TT	NA	0.45 - 2.48	2.48	Yes	Naturally Present in the Environment
Turbidity							
Turbidity	NTU	TT = 1 TT = % of samples <0.3	0	NA	0.86 ⁵ 99.1%	Yes	Soil runoff
Radiological Contaminants							
Alpha emitters	pCi/L	15	0	ND - 13.0	13.0	Yes	Erosion of natural deposits
Combined Radium	pCi/L	5	0	ND - 1.7	1.7	Yes	Erosion of natural deposits
Tap water samples were collected for lead and copper analysis from homes in the service area							
Contaminant	Unit	Action Level	MCLG	Amount Detected (90th Percentile)	Compliance Achieved	Number of Samples Above Action Level	Typical Source
Lead ⁶	ppb	15	0	4	Yes	2	Corrosion of household plumbing systems; Erosion of natural deposits
Copper ⁶	ppm	1.3	1.3	0.43	Yes	0	Corrosion of household plumbing systems; Erosion of natural deposits
¹ This level represents the highest annual quarterly average calculated from the data collected. ² Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. ³ Highest Detected Level is the maximum monthly average detected at the point of entry. Range indicates the average values detected in the distribution system. ⁴ Fluoride is added to the water at therapeutic levels (0.6-1.0 ppm) in certain areas. Please call us for more information about fluoride levels in your area. ⁵ Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches. ⁶ The state of New Jersey allows us to monitor for some substances less than once per year because the concentrations of these substances do not change frequently. Some of our data, though representative, is more than one year old.							
Secondary Contaminants							
Contaminant	Unit	RUL	Range Detected	Highest Detected Level	Typical Source		
Manganese ¹	ppm	0.05	ND - 0.065	0.065	Erosion of natural deposits		
Sodium ²	ppm	50	13 - 188	188	Erosion of natural deposits		
¹ The recommended upper limit for manganese is based on staining of the laundry. Manganese is an essential nutrient, and toxicity is not expected from levels which would be encountered in drinking water. ² For healthy individuals, the sodium intake from water is not important, because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be a concern to individuals on a sodium-restricted diet.							
Unregulated Contaminants							
Contaminant	Years Sampled	Units	Range Detected	Average			
N-nitrosopyrrolidine (NPYR) ¹	2008, 2009	ppb	ND to 0.0023	0.0002			
Perfluorooctanoic Acid (PFOA) ²	2011	ppb	0.007 to 0.019	0.012			
¹ Nitrosamines can form as intermediates and by-products in chemical synthesis and manufacture of rubber, leather, and plastics; can form spontaneously by reaction of precursor amines with nitrosating agents (nitrate and related compounds), or by action of nitrate-reducing bacteria. Foods such as bacon and malt beverages can contain nitrosamines; there is also evidence that they form in the upper GI tract. ² PFOA is a man-made chemical used in the manufacture of fluoropolymers. With non-stick and stain-resistant properties, fluoropolymers have wide application in common household products such as cookware, carpet and all-weather clothing. There is currently no regulatory limit established for PFOA in drinking water. However, in February 2007 the NJ Dept. of Environmental Protection (NJDEP) issued a preliminary guidance level of 0.04 ppb. In order to assist the NJDEP in assessing the occurrence of this substance in NJ, New Jersey American Water began to monitor for PFOA in some of its systems. We are sharing the results in this report because we want to educate our customers about the quality of their drinking water. This proactive approach reinforces our continuing commitment to protect public health and provide quality drinking water and reliable service. For more information on PFOA, contact NJDEP Bureau of Safe Drinking Water at (609) 292-5550.							

Little Falls System - PWS ID# NJ1605001

Table of Detected Contaminants - 2011

Towns Served By This System: | Cedar Grove | Little Falls | North Caldwell in part | West Paterson

Those substances not listed in this table were not found in the treated water supply.

Regulated Substances							
Contaminant	Unit	MCL	MCLG	Range Detected	Highest Detected Level	Compliance Achieved	Typical Source
Disinfectant By-products							
Total Trihalomethanes (TTHM)	ppb	80	NA	ND - 68.6	54 ¹	Yes	By-product of drinking water disinfection
Five Haloacetic Acids (HAA5)	ppb	60	NA	ND - 59.5	31 ¹	Yes	By-product of drinking water disinfection
Disinfectants							
Chlorine	ppm	MRDL = 4	MRDLG = 4	0.57 - 0.96	0.78 ²	Yes	Water additive used to control microbes
Inorganic Contaminants							
Barium	ppm	2	2	0.011 - 0.023	0.023	Yes	Erosion of natural deposits
Fluoride	ppm	4	4	ND - 0.34	0.34	Yes	Erosion of natural deposits
Nickel	ppb	NA	NA	ND - 2.9	2.9	NA	Erosion of natural deposits
Nitrate	ppm	10	10	0.255 - 2.56	2.56	Yes	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium	ppb	50	50	ND - 0.65	0.65	Yes	Erosion of natural deposits
Radiological Contaminants							
Alpha emitters ³	pCi/L	15	0	0.1 - 4.3	2.8 ⁴	Yes	Erosion of natural deposits
Combined Radium ³	pCi/L	5	0	ND - 1.3	0.8 ⁴	Yes	Erosion of natural deposits
Tap water samples were collected for lead and copper analysis from homes in the service area							
Contaminant	Unit	Action Level	MCLG	Amount Detected (90th Percentile)	Compliance Achieved	Number of Samples Above Action Level	Typical Source
Lead ³	ppb	15	0	5	Yes	1	Corrosion of household plumbing systems
Copper ³	ppm	1.3	1.3	0.07	Yes	0	Corrosion of household plumbing systems; Erosion of natural deposits

¹ This level represents the highest annual quarterly average calculated from the data collected.

² Highest Detected Level is the maximum monthly average detected at the point of entry. Range indicates the average values detected in the distribution system.

³ The state of New Jersey allows us to monitor for some substances less than once per year because the concentrations of these substances do not change frequently. Some of our data, though representative, is more than one year old.

⁴ This level represents an annual average of all samples.

Secondary Contaminants					
Contaminant	Unit	RUL	Range Detected	Highest Detected Level	Typical Source
Sodium ¹	ppm	50	28 - 188	188	Erosion of natural deposits

¹ For healthy individuals, the sodium intake from water is not important, because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be a concern to individuals on a sodium-restricted diet.