

PREPARED BY THE ADA DIVISION OF SCIENCE ON BEHALF  
OF THE ADA COUNCIL ON SCIENTIFIC AFFAIRS

# Fluoride water analysis kit

## PRODUCT NAME AND MANUFACTURER

FluoriCheck, Omnii Oral Pharmaceuticals, West Palm Beach, Fla. 33409, 1-800-445-3386, "www.omniiproducts.com"

## DATE OF ACCEPTANCE

Received ADA Seal of Acceptance in June 2002



## SUMMARY

FluoriCheck is a dentist-dispensed fluoride water analysis kit used to determine home water fluoride levels. The optimal fluoride level in drinking water, according to the ADA and the U.S. Public Health Service, is

between 0.7 and 1.2 parts per million, or ppm. Municipal water supplies may or may not adjust fluoride levels to this optimal range. Even when the drinking water supply is fluoridated, however, there are other factors that can affect the fluoride level such as the age of the municipal

water system, the number of treatment plants in the municipality and the use of some in-home water filters (particularly the reverse osmosis and distillation systems). Communities that are supplied with well water may have drinking water with fluoride levels in excess of 1.2 ppm.

Because of these variables, it is important for dentists and pediatricians to determine children's drinking water fluoride level profiles before prescribing them fluoride supplements. Testing home drinking water to determine the fluoride level can help dentists and pediatricians make that determination. Fluoride levels that are too low may increase the risk of developing caries, and those that are too high may increase the risk of developing fluorosis. The ADA, the American Academy of Pediatric Dentistry, the American Academy of Pediatrics and the Centers for Disease Control and Prevention all recommend drinking water that is optimally fluoridated.

## INSTRUCTIONS FOR USE

Dentists should instruct their patients to

- run water from the primary drinking and cooking water source (or their preferred source) for one minute;
- rinse the inside of the vial supplied by Omnii with water;
- completely fill the vial with water and screw the lid on tightly;
- place the vial in the container provided and mail it to Omnii for analysis.

# Fluoridation

**F**luoride is present naturally in all water sources. Community water fluoridation, which has been in place for more than 50 years, is the process of adjusting the fluoride content of fluoride-deficient water to the recommended level for optimal dental health. The recommended level, according to the ADA and U.S. Public Health Service, is 0.7 to 1.2 parts of fluoride per million parts of water. Water fluoridation has been proven to reduce caries in both children and adults.<sup>1</sup> While water fluoridation is an effective and inexpensive means of obtaining the fluoride necessary for tooth caries prevention, not everyone lives in a community with a centralized, public or private water source that can be fluoridated.

Nearly 145 million Americans are receiving the benefits of optimally fluoridated water (62.2 percent of the 232.5 million people with central water supplies). This total includes about 135 million people who receive water from a centralized community water source in which fluoride levels are adjusted to optimum levels and about 10 million people whose water supplies have naturally occurring fluoride levels in the optimum range. This also represents more than 14,300 water systems that serve more than

10,500 U.S. communities. Of the 50 largest U.S. cities, 43 are fluoridated. Fluoridated water (naturally occurring, adjusted or both) benefits more than 360 million people in more than 60 countries, including the United States.

## CONSIDERATIONS

- If the patient's water fluoride level is unknown, his or her drinking water should be tested for fluoride content. For testing of fluoride content, contact the local or state health department.
- All sources of fluoride for a pediatric patient should be evaluated with a thorough fluoride history. Exposure to municipal, well, bottled, school and day-care center water should be considered.
- Ingestion of higher-than-recommended levels of fluoride by children has been associated with an increase in mild dental fluorosis in developing, unerupted teeth.

Visit "[apps.nccd.cdc.gov/MWF/index.asp](http://apps.nccd.cdc.gov/MWF/index.asp)" to determine the fluoridation status of water systems throughout the United States and "[www.ada.org/public/topics/fluoride/fluoride.html](http://www.ada.org/public/topics/fluoride/fluoride.html)" for more fluoridation facts. ■

1. McDonagh MS, Whiting PF, Wilson PM, et al. Systematic review of water fluoridation. *Br Med J* 2000;321:855-64.