

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PUBLIC HEALTH SERVICE

NATIONAL INSTITUTES OF HEALTH

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NO EVIDENCE OF ALLERGY TO FLUORIDES  
IN OPTIMALLY FLUORIDATED WATER -- AMERICAN ACADEMY OF ALLERGY

Opponents frequently cite the possibility of an allergy to fluoride as their reason for opposing fluoridation. Despite repeated statements by the Public Health Service that there has never been a clinically substantiated case of allergy caused by drinking optimally fluoridated water, this argument has continued in vogue.

The American Academy of Allergy has recently evaluated the question of allergy to fluoride as used in the fluoridation of community water supplies. This evaluation included a review of clinical reports. As a result of this evaluation, the Executive Committee of the American Academy of Allergy unanimously adopted the following statement:

"There is no evidence of allergy or intolerance to fluorides as used in the fluoridation of community water supplies."

The complete statement is enclosed.

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Enclosure

A STATEMENT ON THE QUESTION OF ALLERGY TO FLUORIDE AS USED IN THE FLUORIDATION  
OF COMMUNITY WATER SUPPLIES

A request to the American Academy of Allergy has been made by the United States Public Health Service for an evaluation of the question of allergy to fluoride as used in the fluoridation of community water supplies. It was further requested that such an evaluation include a review of clinical reports on allergy to fluoride and express an opinion whether or not such reports constitute valid evidence of a hypersensitivity reaction.

The response to this request has been handled as follows:  
Reports of allergic reactions have been reviewed. First, these reports were evaluated in an attempt to determine whether or not there is sufficient clinical or scientific information to classify any case of presumed fluoride allergy in one of the four major classes of hypersensitivity reaction (Type I-IV) (1). These immunologically mediated reactions are the anaphylactic or reaginic, the cytotoxic, the toxic complex and the delayed-type of reactivity (1). Second, the reports were evaluated to determine whether or not there was sufficient clinical evidence to support the possibility that intolerance or allergy to fluorides might occur as one of the less-well understood types of drug reactions that may or may not be immunologically mediated (2).

The reports of fluoride allergy reviewed (3, 4, 5, 6, 7) listed a wide variety of symptoms including vomiting, abdominal pain, headaches, scotomata, personality change, muscular weakness, painful numbness in extremities, joint pain, migraine headaches, dryness in the mouth, oral ulcers, convulsions, mental deterioration, colitis, pelvic hemorrhages, urticaria, nasal congestion, skin rashes, epigastric distress and hematemesis.

The review of the reported allergic reactions showed no evidence that immunologically mediated reaction of the Types I-IV had been presented. Secondly, the review of the cases reported demonstrated that there was insufficient clinical and laboratory evidence to state that true syndromes of fluoride allergy or intolerance exist.

As a result of this review, the members of the Executive Committee of the American Academy of Allergy have adopted unanimously the following statement:

"There is no evidence of allergy or intolerance to fluorides as used in the fluoridation of community water supplies."

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February 18, 1971

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