

## ● RADIO

Saturday, Feb. 4, 1956, 2:05-2:15 p.m., EST  
 "Adventures in Science" with Watson Davis,  
 director of Science Service, over the CBS Radio  
 Network. Check your local CBS station.

Dr. Russell L. Cecil, emeritus professor of  
 clinical medicine, Cornell University Medical Col-  
 lege, New York, and Dr. Hershel Herzog, organic  
 chemist, Schering Laboratories, Bloomfield, N. J.,  
 will discuss "New Drugs for Arthritis."

## CARDIOLOGY

### Alert Parents to Child Heart Dangers

► **SPECIAL DANGER** to a child's heart  
 threatens in winter when strep, sore  
 throats climb toward their annual peak in  
 numbers.

The strep. infections open the door to  
 rheumatic fever and rheumatic heart at-  
 tacks. To avoid this, the American Heart  
 Association urges parents to call the doctor  
 if answers to the following questions about  
 a sore throat are "Yes:"

1. Did the sore throat come on suddenly?
2. Does your youngster complain that his  
 sore throat hurts most when swallowing?
3. Does it hurt below the angle of the  
 jaw when you press there gently with your  
 fingers? Are the glands swollen there?
4. Does he have a fever of between 101  
 and 104 degrees?
5. Does your child complain of headache?
6. Is he nauseated or has he vomited?
7. Has he been in contact with anyone  
 who has had scarlet fever, which is also  
 a streptococcal infection, or a sore throat?  
 Any child who has been exposed to scarlet  
 fever should be seen by a doctor for pre-  
 ventive treatment even if he does not have  
 a sore throat.

Science News Letter, January 28, 1956



**TURBOPROP PROP TEST** —  
 Checking a Britannia propeller made  
 by de Havilland Propellers Ltd.,  
 workmen fit a pitch-change mechan-  
 ism in the test tunnel at Hatfield,  
 Hertfordshire, England.

## DENTISTRY

# Fluoride in Toothpaste

► **DRUGGISTS** are now ready to sell an  
 anti-decay toothpaste containing a special  
 kind of tin fluoride.

Called Crest, this is the latest and most  
 hopeful of the many dentifrices, ammoni-  
 ated, chlorophyll, anti-enzyme and the rest,  
 made to check caries.

Good results with it, promising early  
 arrival on drug store shelves, were an-  
 nounced almost a year ago (See SNL, Feb.  
 12, 1955, p. 100.)

Like the Salk polio vaccine, however,  
 this promising new toothpaste is reported  
 to have gotten into trouble when a shift  
 was made from small to large scale  
 manufacture.

Dr. Joseph C. Muhler and his group at  
 Indiana University who made the first  
 tests of it were not able to get as good  
 results in later trials. Other dental scien-  
 tists trying it also had disappointing results.

The fluoride in this newest anti-decay  
 toothpaste is a tin salt in which the tin is  
 in the stannous form. A slight shift in  
 acid balance during manufacture might  
 shift this tin to the stannic form. Then the  
 fluoride does not produce its anti-decay  
 effect.

## NUTRITION

# Atom Food Sterilization

► **FOODS** sterilized by atomic radiation  
 may be ready for public consumption  
 sooner than has been generally expected,  
 research reported to the Conference on  
 Radioactive Isotopes in Agriculture held at  
 Michigan State University in East Lansing,  
 Mich., indicates.

Up to now, the chief drawback against  
 "cold sterilization" by irradiation has been  
 the production of off flavors, odors and dis-  
 coloration in many foods, especially meats  
 and dairy products.

Dr. C. F. Niven Jr. of the University  
 of Chicago's American Meat Institute Foun-  
 dation told the conference that use of  
 irradiation at doses below those causing  
 disagreeable side effects appears to lengthen  
 many times the shelf life of refrigerated,  
 prepackaged fresh meats.

Irradiation in lower doses seems to kill  
 or slow down many food-spoiling organ-  
 isms, although it seems not to cause un-  
 wanted chemical changes in the meats  
 resulting in the undesirable qualities, Dr.  
 Niven explained.

Dr. H. W. Schultz, food technologist at  
 Oregon State College, listed milk, cheese,  
 bananas, orange juice and certain cured  
 meat products, such as frankfurters, as  
 "notorious" examples of undesirable flavors  
 when irradiated.

A taste panel gave asparagus, bacon,  
 green beans, beef liver, broccoli, Brussels  
 sprouts, carrots, chicken, codfish cakes, pork

and pork sausage a taste rating of "good,"  
 he said.

Although some irradiated meats earned  
 the "good" mark, the panel said they were  
 "different" in flavor from non-irradiated  
 meats. Dr. Schultz said it is not known  
 how this difference in flavor will influ-  
 ence consumer acceptance of the meats.

Tests conducted by the University of  
 Colorado and the Medical Nutrition Labo-  
 ratory of Fitzsimons Army Hospital indi-  
 cated no toxic materials are formed during  
 "cold sterilization," Dr. Herman F. Kray-  
 bill and M. S. Read told the conference.

In the experiments, rats were fed a diet  
 consisting entirely of nine irradiated foods  
 for nine months. Growth, reproduction and  
 performance of these animals was "quite  
 satisfactory," they reported.

Studies to appraise the wholesomeness  
 of such foods when fed for long periods  
 of time will continue for two years, the  
 scientists said.

Science News Letter, January 28, 1956

Among the nation's 10,000,000 *heart dis-*  
*ease* sufferers are some 500,000 children of  
 school age.

*Pigs* try to cool off in hot weather by  
 lying quietly for hours at a time and by  
 severely limiting their feed intake; this  
 results in a sharp decline in their growth  
 rate and inefficiency of swine production.