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# SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE • JANUARY 23, 1943



Fire Under Snow

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A SCIENCE SERVICE PUBLICATION

## Do You Know?

Brazil has replaced India as our main source of industrially useful *castor beans* and oil.

Limitation of *alcohol* in toiletries will save a million gallons a year for military production.

The United States produced more *metals* and minerals in 1942 than at any time in its history.

Soldiers of the Arctic Medical Corps carry collapsible *litters* which can be clamped to skis, to drag the wounded over the snow.

A method of reducing *liver* to a brown powder, worked out by U. S. Department of Agriculture chemists, conserves shipping space.

For ordinary dried or evaporated fruit, the water content is reduced from about 80% to 25%, but in *dehydrated* food it is reduced to 7% or less.

*Cocanut oil*, now scarce, produces quick-lathering soap because it contains a large proportion of lauric and myristic acids, which chemists call "short-chain carbon acids."

Our national *diet* was better in 1941 and 1942 than in the previous five years, due to higher income levels, enriched flour, and government distribution of food in schools.

## Question Box

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#### ASTRONOMY

What difficulties will keep astronomers from observing the coming total eclipse of the sun? p. 51.

#### BOTANY

How does colchicine affect the plant from which it comes? p. 56.

#### CHEMISTRY

What is the fundamental difference between rubber and nylon? p. 52.

What material for airplanes can be made from soybeans? p. 57.

#### ENGINEERING

How are emergency radio stations being used to bridge gaps in telephone communications lines? p. 58.

#### GEOLOGY

How could gas now wasted in coal seams be saved for commercial use? p. 57.

#### HORTICULTURE

Why should you save wood ashes this winter? p. 54.

#### MANPOWER

How may social security laws affect the recruitment of labor for war production? p. 59.

#### MEDICINE

How can treatment with quinine be made more effective? p. 53.

How may injury lead to cancer? p. 63.

What honor has been awarded to the man who is responsible for the Schneider Index? p. 55.

What new hope is there for developing a new chemical weapon against infantile paralysis? p. 52.

What nine rules are offered to protect the health of the tired business man? p. 62.

*Most articles which appear in SCIENCE NEWS LETTER are based on communications to Science Service, or on papers before meetings. Where published sources are used they are referred to in the article.*

What sort of diet will enable some people to eat foods to which they are allergic? p. 55.

What sulfa drug has been used effectively on chronic sinus sufferers? p. 57.

#### MEDICINE-PSYCHOLOGY

What psychological devices can be used to speed the recovery of industrial and war injured persons? p. 60.

#### METALLURGY

How do substitute materials for airplane engines compare with original materials used? p. 61.

#### NUTRITION

What happens to the thiamin in peas when you cook them in soda? p. 57.

What scientific study should be the basis of post-war feeding of hungry peoples? p. 60.

#### PHYSIOLOGY

How can an allergy produce deafness? p. 56.

How can the beginning stages of vitamin deficiency be detected? p. 56.

#### POPULATION

Will women outnumber men after the war? p. 56.

#### PSYCHOLOGY

How much do individuals differ in sensitivity to pain from electric current? p. 56.

#### PUBLIC HEALTH

In what cities are deaths from tuberculosis increasing? p. 53.

What injury accounts for most of the time lost among shipyard workers? p. 55.

Why may a worker poisoned by nitrous fumes fail to get immediate medical attention? p. 54.

#### VETERINARY MEDICINE

How was the new vaccine for distemper prepared? p. 51.

Cultivated *guayule* may yield twice as much rubber as the wild plant.

The *optic nerve*, which connects the human eye with the brain like a telephone cable, contains about 800 bundles of nerve fibers.

*Tanganyika*, in British East Africa, is the world's greatest source of sisal.

Stratosphere masks worn by pilots of Kelly Field are lined with wool-like *asbestos* to protect wearers from both cold and fire.

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