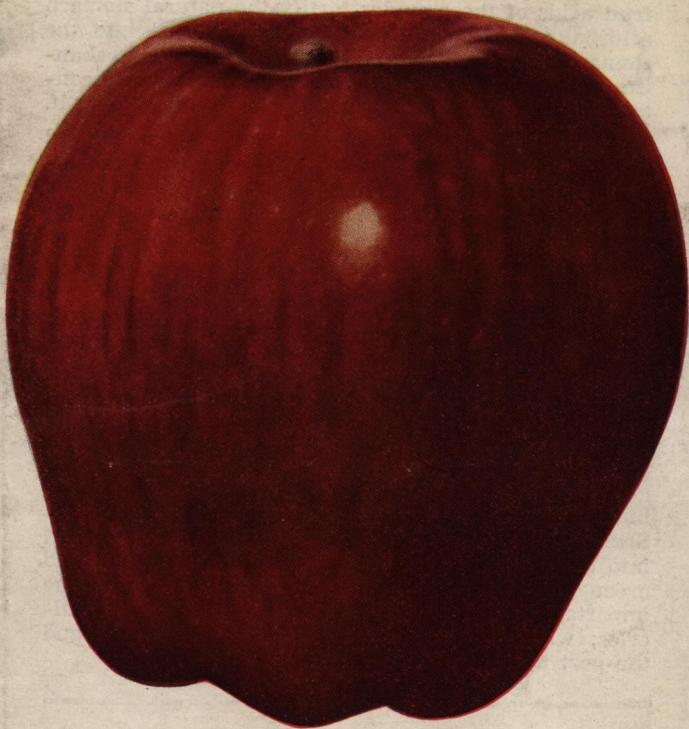




WASHINGTON STATE APPLES



Interesting facts everyone should know
about this famous health fruit grown in the
mountain valleys of the State of Washington.

Published by

SECRETARY OF STATE, BELLE REEVES

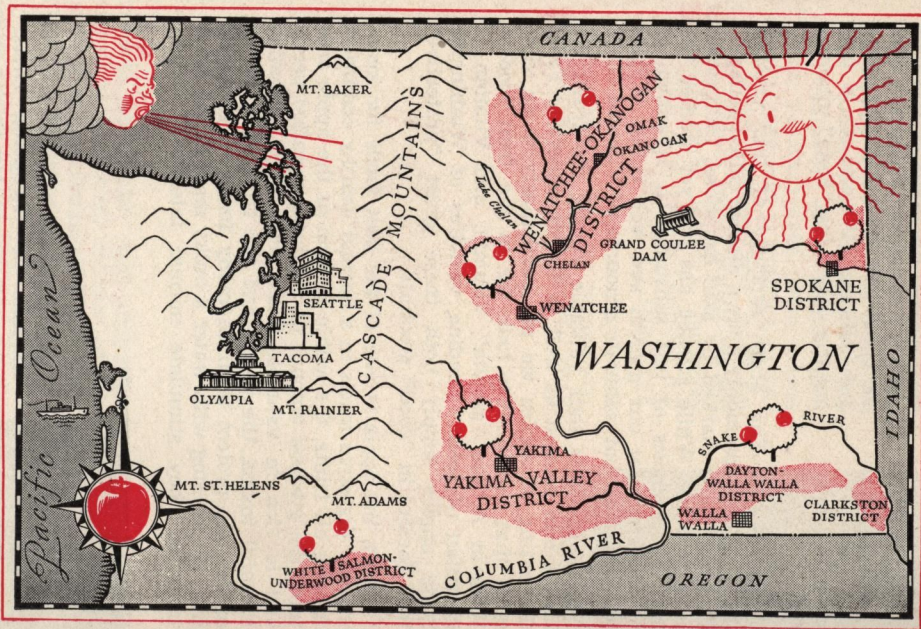
In Cooperation With

WASHINGTON STATE APPLE ADVERTISING COMMISSION

WHERE APPLES ARE GROWN IN THE "WORLD'S APPLE BOWL"

Washington grows nearly all of its apples just east of the snowy Cascade Mountains. In these mountain sheltered valleys of fertile volcanic ash soil, apples thrive as nowhere else on earth.

Here, too, the climate is ideal for apples. The Cascade Range shuts off the damp Coastal winds. And while the summer nights are cool, as apples want nights to be, the days are long and sunny—which makes for bigger, juicier, richer-flavored apples.





APPLES FOR HEALTH

Supply these many food essentials



PECTIN

as in
jelly



—promotes normal intestinal activity. It combines with water to form more "bulk" than do so-called "roughage foods." Bulk from pectin is not irritating to the intestine. Apples are a primary source.

CALCIUM

as in
milk



—is a bone-building material, helps regulate other body processes. Milk is rich in it. Apples offer it, and eating apples helps the system absorb the calcium in other foods.

PHOSPHORUS

as in
cheese



—is another important bone and tooth building element. Apples are a fair source of this vital mineral for which cheese, fish, nuts, and eggs are often recommended.

IRON

as in
eggs



—plays a vital part in making red blood. Apples contain iron; and their regular eating also helps the body to absorb the iron in other foods such as eggs, and liver.

ENERGY

as in
bread



—comes largely from "fuel foods" like bread, sugar. But the fruit sugar in apples is in "pre-digested" form —its energy is available to the system almost instantly.

VITAMIN A

as in
carrots



—helps ward off colds and other infections. Also promotes growth. Carrots are rich in it. Apples, such as the Newtown, have been found to contain 50% more than oranges.

VITAMIN B

as in
yeast



—helps to keep the nerves healthy. It is provided in primary quantities by yeast, milk and eggs. Apples are commended as a supplementary source of vitamin B.

VITAMIN C

as in
tomatoes



—is vital in keeping bones and teeth sound, the body normal. Apples are rated a "good" source of vitamin C. Other sources are the citrus fruits, tomatoes and green leafy vegetables.

VITAMIN G

as in
liver



—has been called the "appetite vitamin." Promotes digestion and growth. Apples are rated a better source than many of the fruits. Yeast, liver, milk are rich in it.

LIFE EXPECTANCY IS GREATER IN WASHINGTON STATE

WASHINGTON BOYS have an average life expectancy of 61.37 years, compared to the average U. S. boy who has a life expectancy at birth of 59.31 years.

WASHINGTON GIRLS have an average life expectancy of 65.41 years, whereas the average U. S. girl has a life expectancy at birth of 62.83 years.

Why do life expectancy and health figures indicate Washington as a healthier place to live? Climate, outdoor living are reasons often given. Moreover, in the State of Washington, children and adults eat a great deal of what medical men call "protective" foods, one of the greatest of which is the Washington State Apple.

THE VALLEY OF THE WENATCHEE

Washington produces annually one-fourth of all U. S. apples; of the total Washington crop the Wenatchee Valley district produces more than 55%. The first carlot shipments were made from this district. In recent years the crop here has ranged from 15,000 to 25,000 carlots.

The Wenatchee-Okanogan district embraces the protected areas below the eastern slopes of the Cascade Mountains—the great Wenatchee Valley, Entiat Valley, Lake Chelan, Okanogan and Methow Valleys—in all, an irrigated district stretching about 150 miles north and south. Wenatchee Valley proper is from three to five miles wide and approximately 33 miles long and borders the Columbia and Wenatchee rivers.

THE CITY OF WENATCHEE, with a population of 16,080, is the apple capital of America and the gateway to North Central Washington. In 25 years this city and the territory surrounding it has jumped its assessed valuation from \$2,000,000 to \$52,000,000.

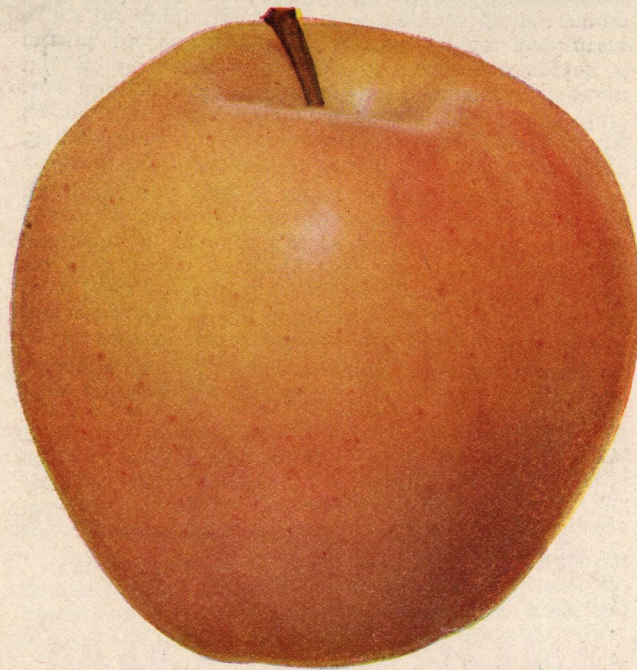
THE VALLEY OF THE YAKIMA

THE CITY OF YAKIMA (population 30,000) is a modern fruit metropolis. The valleys and hills surrounding the city are wonderfully suited for the raising of big, crisp, bright-colored apples.

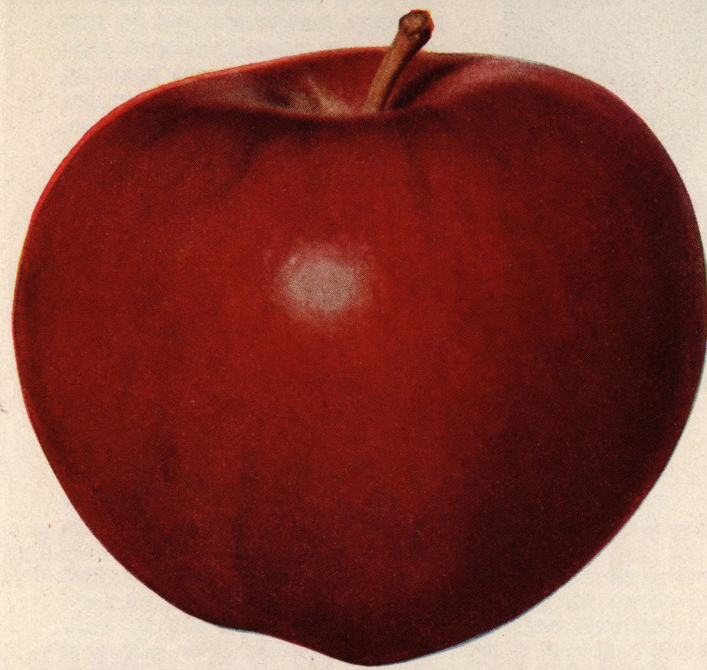
The Yakima Valley District contributes annually from 10,000 to 12,000 carlots of apples, or an average of about 43 per cent of the state's total.

Other contributing districts in this state in terms of carlots are as follows: Walla Walla, 249; Eastern Washington, 271; Hood River and White Salmon, 212. Total, 532 carlots or approximately 2 per cent of the entire state's shipments.

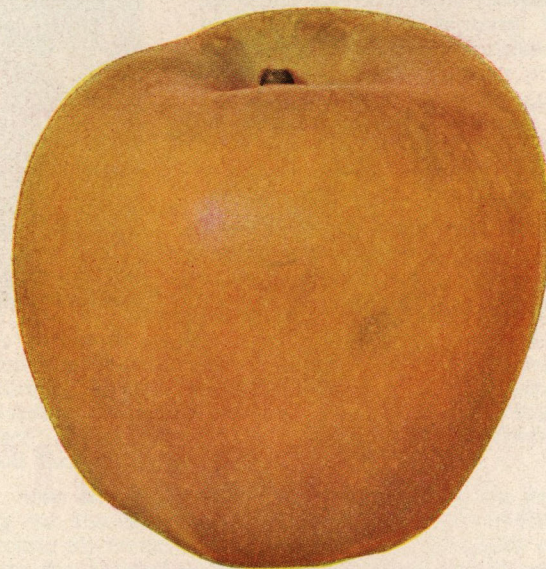
Averaged from 1933 to 1937, Washington state shipped annually 28,123 carlots. Fifty-three per cent of these went to 66 U. S. cities in other states. Of the total United States and Canadian foreign apple shipments, Washington contributes approximately 44 per cent (2,819,540 bushels) annually.



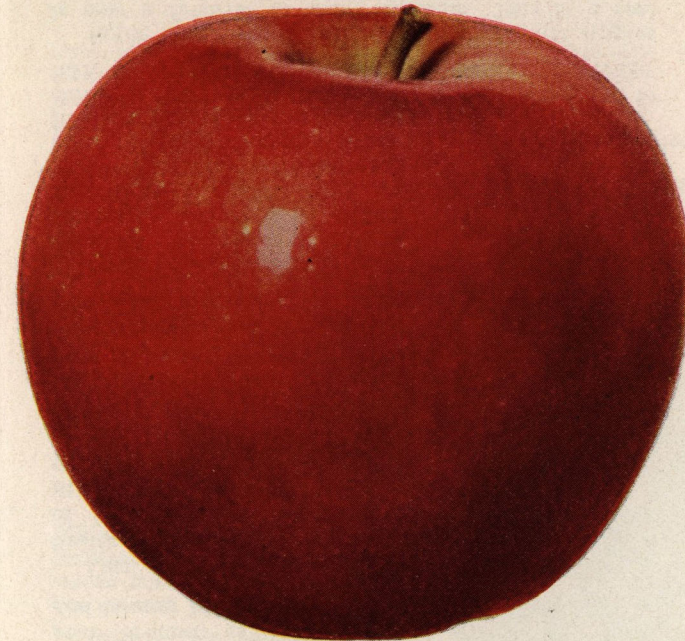
GOLDEN DELICIOUS—Solid gold in color, firm celled and brisk to the taste, Washington's Golden Delicious is ideal for eating out of hand. Grand for salads, too. Best in November and December.



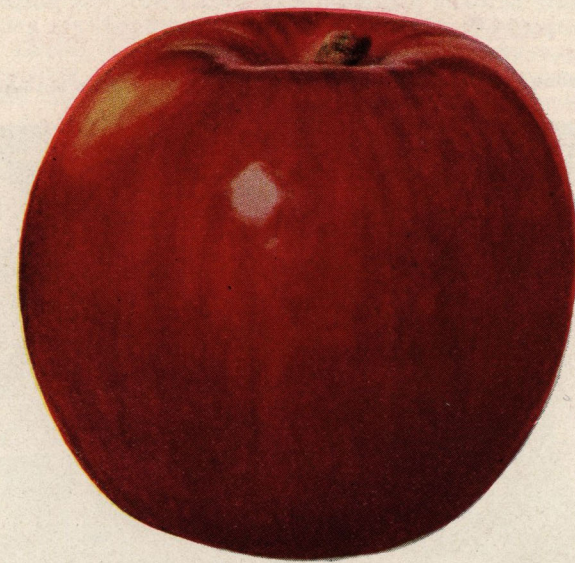
WINESAP—Bright crimson red is the Washington State Winesap. Juicy and tangy in flavor. An extra good eating apple and a grand "keeper." Its long season runs from November to June.



YELLOW NEWTOWN—Here's what Washington's ideal soils and climate do to the yellow apples. Many call this flavory apple the "Autocrat of the Breakfast Table." Yellow Newtowns' season: January to June.



ROME BEAUTY—The "baking apple supreme" as Washington grows it. Juicy, mildly acid and aromatic. When you bake it, or cook in pie, prepare for a new taste thrill! Its season: November to March.



JONATHAN—A pleasant, lingering tartness of flavor rewards you for biting into a Washington State Jonathan. Its meat is fine in structure, crackling crisp, marvelous eating. Season: September to December.

| | |
|---------------------|------|
| Typhoid Fever | 0.6% |
| Dysentery | 2.7% |
| Scarlet Fever | 2.0% |

While Drs. Heisler, Moro and others were working with apple therapy, such investigators as Zilva, Sherman, Fellers and a host of others were looking into the nutritional values of the principal fruits and green vegetables. People began to learn about the importance of vitamins, minerals, proteins and calories; where these nutritive factors are found; and the part they play in bodily functions.

THE APPLE PICTURED ON FRONT COVER IS A DELICIOUS

Under its rich red skin, with its faint "shadows of light," lies clean white meat—fine grained, mild and fragrant. You'll know the Delicious by those five low ridges down its side which give it that broad-shouldered look. October to February is its season.



An old Washington custom—"The Apple Hour"

THE APPLE IN REDUCING DIETS

The apple is a good food to include in "Reducing Diets," also. It is very low in fat and protein content and contains but a relatively small number of calories.

This means that it may be featured in the diet of those who wish to keep a slim waistline, yet wish to protect themselves with a supply of the food minerals and vitamins.

It is well known that normal people eat altogether too little of the protective foods—fruits and vegetables. By nutritionists everywhere, apples such as those wonderful "Eating Varieties" grown in Washington State, are rated a great protective food. And the "pro-

became one great open chimney from which, for countless centuries, billions of tons of mineralized, molten lava, volcanic dust and ash flowed and settled over the Cascades' eastern rim, an area which today provides the world one of its richest agricultural lands. This section of the State of Washington has become the most important apple producing area in the world.

Here not only the highly mineralized soil, but climatic conditions, also, are just about perfect for apple culture. The Cascade Range protects this region from the damp coastal winds, and keeps the air dry, the way apples seem to like it best. The annual rainfall here is less than twelve inches and the summer days are unusually long. Thus, Washington State Apples get more sunshine and are able to grow bigger, juicier and wonderfully tangy. Even the short, cool nights in this region do their part in painting these Washington apples with more vivid hues of red and yellow. Cool nights, furthermore, make for special firmness, so that these Washington State Apples fairly crackle to your bite.

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Entering the packing house, Washington apples go first to the washers where they are thoroughly cleansed, then each apple is cool-air dried. Next, the apples go to the sorting machine where expert women workers examine them and sort out all that have imperfections and grade them in order of their perfection—"Extra Fancy," "Fancy," and "Choice."

The selected apples now pass to the sizing machine, an endless belt flanked by soft lined bins. Automatically measured here for weight and diameter the apples are gently rolled into the proper size bins.

Apples for shipment are wrapped in special oiled paper when packed; then carefully placed in boxes. The boxes move into refrigerator cars or warehouses where continuous refrigeration keeps them at peak goodness, ready for the markets of the world.

WHY WASHINGTON STATE APPLES ARE KNOWN AS ONE OF THE GREATEST HEALTH FRUITS

For centuries the world has known that "apples are healthful to eat." Folklore gives us endless examples.

In recent years, science has confirmed and explained many of the therapeutic qualities that people have been attributing to apples for centuries. A typical case is the evidence that has been secured and published in articles and books in most of the languages of the world, on the value of the apple in the treatment and cure of intestinal disorders.

From the provinces of Silesia and Thuringia, Germany, where the peasants eat lots of apples, came the legend, "an apple scraped from the top to cure diarrhea and from the bottom to cure constipation." From this simple adage of the curative power of apples, it is said, the celebrated Dr. Heisler got his inspiration to try the apple treatment on a diarrhea patient whom he had been unable to help with any other method.

There was immediate improvement. So Dr. Heisler tried apples on other cases of intestinal disorders, with equal success. This was in 1908. So careful and painstaking a scientist was he, that not until 1929, some twenty years later, did he publish his first report on the apple treatment for serious intestinal disorders.

Since 1929 numerous other doctors have taken up the treatment and published their findings. Thousands of case histories have been reported from a dozen countries. Throughout these reports the predominating feature is the efficacy of the apple diet in the treatment of intestinal disorders. And recently the Council on Foods of the American Medical Association has approved the use of apples in the treatment of diarrhea.

Studies by Dr. Ira Manville reveal that by eating regularly of Washington State Apples, we can aid the body in its defense against intestinal "flu." The function of the apple in this regard is twofold. First, the fruit acids of these apples fortify the natural stomach acids and thus help to kill germs that get into the stomach. Second, apple pulp assists a defense mechanism that is linked with the mucous membrane to control disease-causing bacteria in the large intestine itself.

The importance of these discoveries is evidenced by the number of people who die each year from influenza, enteritis and dysentery. This is summarized in per cent per 100,000 people in the following table:

| | |
|------------------------------------|-------|
| Influenza | 17.3% |
| Enteritis (under 2 years) | 13.4% |
| Enteritis (2 years and over) | 4.9% |
| Measles | 5.5% |
| Smallpox | .01% |
| Bronchitis | 3.3% |
| Typhoid Fever | 3.3% |
| Dysentery | 2.7% |
| Scarlet Fever | 2.0% |

While Drs. Heisler, Moro and others were working with apple therapy, such investigators as Zilva, Sherman, Fellers and a host of others were looking into the nutritional values of the principal fruits and green vegetables. People began to learn about the importance of vitamins, minerals, proteins and calories; where these nutritive factors are found; and the part they play in bodily functions.

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MINERALS IN THE APPLE

In the apple there are various important minerals, reported to be present in all edible portions in the following percentages: Calcium .007%; magnesium .008%; potassium .27%; sodium .011%; phosphorus .012%; sulphur .006%; iron .00036%. The apple, while not the largest food source of these minerals, compares favorably with other protective fruits. And science tells us that the regular eating of apples helps the system absorb the iron and calcium in other foods we eat. Important, too, is the fact that the minerals in the apple are easily assimilated by the body, and thus especially helpful in the building of blood, bone, teeth and tissue.



For her: Health guarding pectin, minerals and vitamins

THE APPLE AND VITAMINS

About 1910, a new word, "vitamin," came into being, derived from the Latin, "vita," meaning Life.

VITAMIN A: The vitamin A itself has a marked effect on growth. It also plays a large part in the ability of the individual to ward off infection, particularly in the passages of the nose and throat. A Vitamin A deficiency reduces one's resistance to the common cold. Apples contain good amounts of Vitamin A. Recent investigators have shown that some varieties of Washington State apples exceed the orange by as much as 50% in Vitamin A potency. Oranges were considered at one time to be second only to such foods as milk, butter, and eggs in this respect.

VITAMIN B: Vitamin B is often called the nerve vitamin, since it has to do with controlling the functions of the nervous system. An extreme shortage gives rise to a disease called beri-beri, a nervous affliction marked by wasting of muscles, paralysis, anemia, and neuralgic pains. Partial deficiencies cause sagging stomach and counteract normal functioning of the intestinal tract as well as the nerves. Apples—not a leading source of this vitamin—are yet among

those foods which nutritionists recommend for use in the diet to supply Vitamin B.

VITAMIN C: Before the turn of the century, sailors who went on extended voyages often developed a disease called scurvy. This we know today to be a direct result of Vitamin C shortage. These sailors when they returned home were given large quantities of fresh fruits and vegetables, and the fruit and vegetable treatment usually relieved the disease. Apples played a prominent part in those early diets to "cure" scurvy. In scurvy, the joints become tender; and the appetite falls off, leading to loss of weight. Certain conditions in the blood vessels give rise to internal hemorrhages. And the bones and teeth become porous and delicate. Vitamin C is frequently called the "bone" vitamin.

VITAMIN G: The acute shortage of this vitamin shows up as a commonly known disease called pellagra. This disease is marked by skin eruptions, indigestion and diarrhea. While science has not yet studied the lesser deficiencies of this substance, it is known to be necessary for our growth and well being. Apples contain small but valuable amounts of Vitamin G.

The apple is thus valuable among the fruits for its vitamin content as well as for its minerals. From the eating of apples we get particularly those vitamins that nutritionists look for in the fruit foods—Vitamin A, the "growth" Vitamin, and Vitamin C, guardian of teeth. Leading varieties of Washington State apples supply both these great "protective" food factors in "good" amounts.

Also, the apple is one of the best foods for keeping our digestive tracts in a normal healthy condition. Among all fruits, the edible portion of the apple contains the greatest amount of a substance called pectin and is rich in valuable fruit acids. By combating harmful toxins, the pectin and the fruit acids of the apple help protect us from many forms of intestinal ills. By forming with water a bulky mass in the lower intestine, they stimulate normal intestinal activity.

THE APPLE IN REDUCING DIETS

The apple is a good food to include in "Reducing Diets," also. It is very low in fat and protein content and contains but a relatively small number of calories.

This means that it may be featured in the diet of those who wish to keep a slim waistline, yet wish to protect themselves with a supply of the food minerals and vitamins.

It is well known that normal people eat altogether too little of the protective foods—fruits and vegetables. By nutritionists everywhere, apples such as those wonderful "Eating Varieties" grown in Washington State, are rated a great protective food. And the "pro-

ductive" apple tastes good, is available practically the whole year around, is inexpensive, and is easy to secure.

One of the first rules of health should be to eat freely of these luscious Washington State Apples the year around. Children particularly have loved the big juicy apple as it is grown in the State of Washington, for here, nature has set up a real appetite appeal to induce them to eat one of the things that are good for them.

Fresh apple juice made from flavorful Washington State Apples is a new daily health way of enjoying this fruit. In addition to the commercial brands of Washington apple juice on the market, new machines for home and fountain have been developed to turn the fruit into a healthful, refreshing beverage.

Apple Bread made from Washington State Apples is now a favorite in many sections. This is a real health bread that stays fresh longer and is particularly enjoyed by children because of its fine flavor.

COMPOSITION OF APPLES

Data collected by the U. S. Department of Agriculture from many analyses show that the chemical composition of the edible portion of an average apple is as follows:

| | |
|--------------------------|-------|
| Moisture | 84.1% |
| Fat | 0.4% |
| Total carbohydrate | |
| (Including fiber) | 14.9% |
| Fiber | 1.0% |
| Sugars as invert | 11.1% |
| Protein | .3% |
| Ash | .29% |
| Acid as malic | .47% |

HOW THE STATE OF WASHINGTON BECAME THE "APPLE BOWL OF THE WORLD"

Millions of years back into that dim past before civilization's appearance, a wise Creator put into being forces that were to provide for the sustenance of all life created upon the surface of the earth.

During this period, known to Geologists as the Mesozoic, new continents appeared and older ones underwent tremendous changes. In the Northwest portion of the American Continent, mighty forces were at work pressing upward and outward upon its surface, to form what is now known as the Cascade Mountains in the State of Washington. The Cascades became one great open chimney from which, for countless centuries, billions of tons of mineralized, molten lava, volcanic dust and ash flowed and settled over the Cascades' eastern rim, an area which today provides the world one of its richest agricultural lands. This section of the State of Washington has become the most important apple producing area in the world.

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Crisp and vividly colored, Washington apples are grown especially for eating out of hand

THE HISTORY OF WASHINGTON STATE APPLES

The apple as we of today know it was originally an immigrant from Southwestern Asia into Europe, and subsequently to North America.

The history of the Northwest's first apple trees, however, dates back to the planting of apple seeds brought directly from England by Captain Simpson in 1826. These became the first apple trees in Washington and today, after more than one hundred years, they are still bearing fruit at Vancouver, Washington.

During the early days of Washington's history, apple growing was confined largely to the family orchard. But with the development of commercial production—the introduction of scientific culture, of large scale packing, shipping and storing facilities—the apple industry in the State of Washington grew swiftly.

THE GROWTH OF IRRIGATION

According to the records, Sebastian Lauber and Charles and Joseph Schanno were the first apple growers to divert water from Wide Hollow Creek to irrigate their fields and gardens in Yakima Valley. From these attempts grew the great irrigation projects of today in the Wenatchee and Yakima valleys.

Apple production is an intensive business with the fruit growers of Washington's orchard districts. The yield per acre is high, ranging from 300 to 1,000 boxes per acre, and most of the growers devote their entire time to the development of finer apples, with the result that Washington apples are regarded today as the finest eating apples in the world.

PREPARING WASHINGTON STATE APPLES FOR YOU

The extreme care taken in the preparation of Washington State Apples for market begins each year when the first fruit appears on the trees. Workers pinch off surplus young apples so each tree will put all its energy into ripening the best fruit. This makes for apples that are juicier, larger and more nutritious.

When apples mature in the State of Washington, they are carefully picked, usually by gloved hands, and are slipped into white canvas picking bags designed to prevent bruising. After transfer to orchard lugs they are hurried to the central packing houses where they are made ready for market.

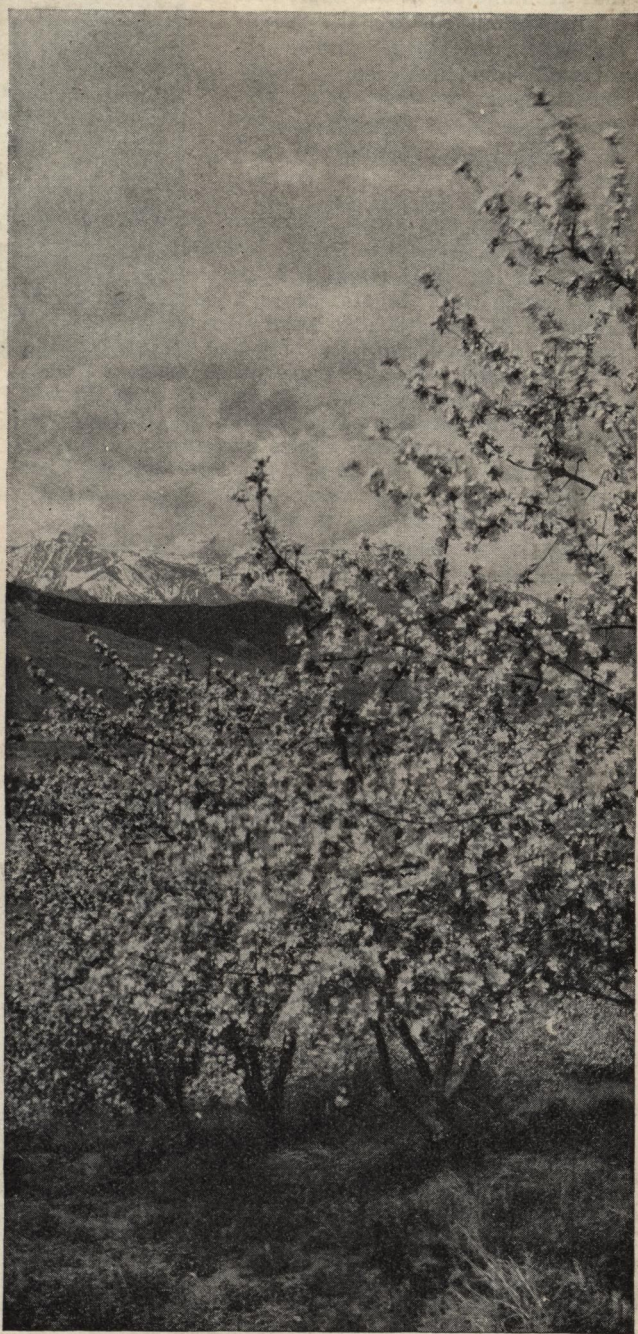
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An old Washington custom—"The Apple Hour"



A Washington valley in springtime