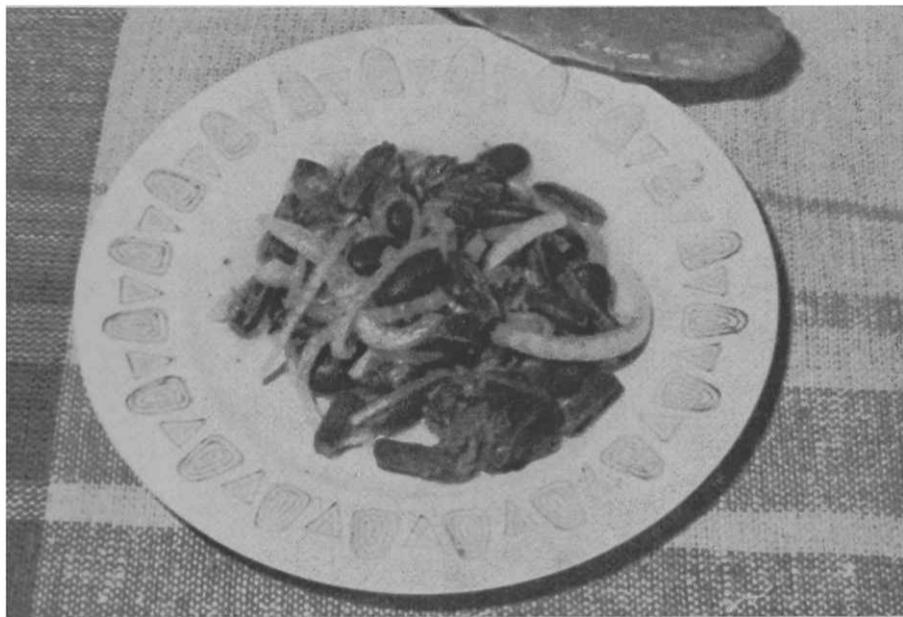
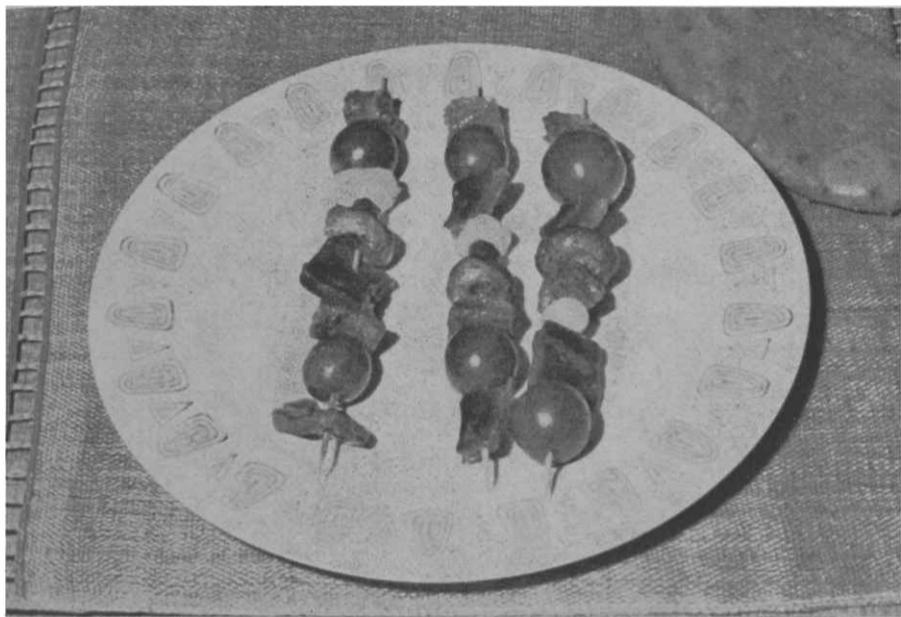


Today's Newest Vegetable — Prickly Pear Cactus

Nancy Orr and Ann Tinsley



The prickly pear cactus has the potential for becoming a tasty, inexpensive addition to North American diets. Prickly pear cactus pads, commonly called nopales, can be used as a vegetable similar to green pepper or okra when properly prepared. They can also furnish important nutrients to the diet. A generous serving of nopales will supply approximately $\frac{1}{2}$ the recommended daily allowance for vitamin C.¹ It also contains several important minerals (such as potassium, iron and calcium) which are needed for proper body function. Vitamin A is present in lesser amounts but still contributes to the amount of vitamins needed daily.

Nopales are also low in calories. They provide only 37 calories per $3\frac{1}{3}$ oz. serving;² are comparable to broccoli or carrots in calories per ounce.

About the Authors — Nancy Orr researched this article while a student in Experimental Food; Division of Food, Human Nutrition and Dietetics; School of Home Economics. The course is taught by Ann Tinsley, at The University of Arizona.

¹See Bibliography at end of article for references in text.

The amount of carbohydrate in the cactus pads tends to vary according to the age of the pad, the soil and the season.³ Minerals in the prickly pear also vary. In the southwestern United States, amounts of potassium, magnesium and calcium will be higher than in areas with more rainfall.⁴

The Indians and Mexicans have known for centuries that the common prickly pear is an excellent food source.^{5,6} The Mexicans still use the nopales in their dishes today.⁷ They can be purchased fresh in some markets and are also found canned on grocery shelves in Spanish American communities, and where there is demand for the product.

There are over 100 species of prickly pear in the U.S. alone.¹ Arizona contains eleven common varieties. These species differ in taste due to their chemical make-up, the time of year, the age of the pad, the soil, the rainfall and climate. For these reasons, the recipes developed use only one type of cactus, the Burbank Spineless.²

The Burbank Spineless is easy to distinguish from other varieties because it has a minimum of spines. This makes the pad easier to handle than other varieties. The flavor is excellent, and the plants are found in abundance in the Tucson area where this research

was done. The Burbank Spineless is used often in landscaping of southwestern homes, and most people would be happy to let you "prune" their cactus. Be sure to ask for permission. You might consider starting your own "orchard," but the Arizona Native Plants Law* prohibits digging up or transporting protected plants without a permit. Contact the Arizona Commission of Agriculture and Horticulture for details, before you decide.**

In selecting the tastiest, most tender pads, the younger small dark green pads were chosen. They were slightly flexible when bent. These younger pads are more abundant in spring, or after a period of rainfall. Once picked, the pads will stay fresh for up to two weeks if stored in an air tight container in the refrigerator.

To prepare for cooking, grasp the pad in one hand, and with a paring knife scrape off the tiny stickers. Do this under running water, or rinse thoroughly and inspect for stickers. Try to peel off the tough outer skin. Often it will peel like a ripe peach.

*Arizona Revised Statutes: Chapter 7, Article 1 — Section 3-901 (A,B,C).

**Arizona Commission of Agriculture and Horticulture, 1688 West Adams, Phoenix, Arizona 85007.

Now cut the pad into desired size. For the recipes given, it is necessary to first parboil the nopales (about 5-10 minutes) until firm but tender. This insures the right texture, and removes most of the slime found in the prickly pear.

With the high prices of green peppers, the advantage of a free tasty substitute is obvious. Nopales can be substitutes for green pepper in shish kabobs, pizza, omelets and pepper steak. It can be used instead of green beans in casseroles, or 3-bean salad. It can also be served plain with butter, with tomatoes, rice, or even made into relish.

The possibility for recipe development is endless. Its use in foreign native dishes should be explored. Since the prickly pear can adapt to such a variety of environments, it could be one of the answers in solving the problem of worldwide hunger and vitamin deficiencies.

Here in the desert southwest, the prickly pear could help ease the crunch of inflation and the high cost of food. It is free, has a unique flavor, and yet can be used as a substitute for more expensive vegetables such as green pepper, asparagus or fresh green beans. It adds variety to any meal with no added cost. All it takes is a little time, and your own imagination.

Bibliography

- ¹ Kearney, Thomas: *Arizona Flora*. Berkley, LA.: University of California Press, 1951.
- ² Burbank, Luther: *Luther Burbank — His Methods and Discoveries, Their Practical Application*. Vol. 8. N.Y. and London: Burbank Press, 1914.
- ³ Bowes & Church: *Food Values of Portions Commonly Used*. Philadelphia, Toronto; J. B. Lippincott Co., 1970.
- ⁴ *Food Comparison Table for Use in Latin American Countries*. Sponsored by Instit. of Nutri. of Center Amer., and Panama, Guatemala City, L.A. Interdepartmental Committee on Nutrition of Nat'l Defense, Nat'l Instit. of Health. Bethesda, Maryland, U.S.A., June 1961.
- ⁵ Spoehr, Herman: *The Carbohydrate Economy of the Cacti*. Wash. D.C.: the Carnegie Instit. of Wash., 1919.
- ⁶ Groffiths; Hare: *Prickly-Pear and Other Cacti as Food for Stock*. Bulletin #66. N. Mex. College of Agri. and Mech. Arts; Santa Fe, N.M., 1906.
- ⁷ Hesse, Zora G.: *Southwestern Indian Recipe Book — Apache, Pima, Papago, Pueblo, Navajo*. Vol. 1, Palmer Lake, Colo: Filter Press 1973.
- ⁸ Harrington, H.D.: *Western Edible Wild Plants*. Univ. of N. Mex. Press, 1972.
- ⁹ Ortiz, Elizabeth L.: *The Complete Book of Mexican Cooking*, N.Y. N.Y.: M. Evans Co., Inc. 1967.

Shish-Kabob

1/2 lb. flank steak, cubed and marinated in sauce below
 8 cherry tomatoes
 1/2 c. chunked pineapple
 1/2 c. chunked nopalitos*, parboiled

8 fresh mushrooms
 8 small white onions, parboiled

On skewers, alternate the listed ingredients. Place over hot coals, or broil in oven until meat reaches desired doneness. During cooking, baste kabobs with the marinade sauce.

Marinade

1/4 clove garlic, minced
 2 T. minced onion
 1/8 tsp. oregano
 1/16 tsp. thyme

1/8 tsp. pepper
 1/4 tsp. salt
 2 T. vegetable oil
 4 tsp. white vinegar

Combine ingredients, and add meat chunks. Let meat marinate in sauce over night in refrigerator.

Pepper Steak

1/2 lb. flank steak (use meat tenderizer if desired)
 1/2 c. chopped onions
 1/4 c. beef broth or use bouillon
 1 T. soy sauce
 1/2 clove garlic, minced

1/2 c. nopale strips
 1 1/2 tsp. corn starch
 5 T. cold water
 4 cherry tomatoes, quartered

Brown meat. Add onions and cook until soft. Add broth, soy sauce, nopales and garlic. Cover and simmer 10 minutes. Blend together corn starch and water, and add to meat mixture. Cook until thickened. Add tomatoes and cook until heated through.

Three Vegetable Salad

1 c. nopalitos, cut in 1/4 by 1 inch strips and parboiled
 1 c. red bell pepper, cut the same and parboiled
 1/2 to 3/4 c. onion rings, sliced very thin

Dressing:

1/2 c. vinegar
 1/2 c. vegetable oil
 1/2 c. sugar

1 tsp. salt
 1/2 tsp. pepper

Mix dressing in a blender or mixer until all sugar is thoroughly dissolved. Add the dressing to the vegetables in a bowl, cover and refrigerate. Salad will keep for several days.

Stuffed Nopales

These consist of a nopale pad on the bottom, rice filling next, with a cheese sauce on top.

Rice Filling:

4 T. chopped onion
 1/2 lb. hamburger
 1 c. cooked rice

3/4 c. nopalitos, parboiled, and chopped
 1/2 tsp. salt
 1/8 tsp. each oregano and pepper

Brown hamburger; add onion and cook until onion is soft. Add rice and seasonings, and hold while making cheese sauce:

Cheese Sauce:

2 T. margarine
 2 T. flour
 1 c. milk

1 1/2 c. grated American cheese
 1 tsp. salt
 1/8 tsp. pepper

In saucepan, melt fat and stir in flour. Slowly add milk, and stir continuously. Add spices and continue stirring until sauce is thick. Add cheese, and stir until melted.

Parboil a whole, young nopale pad (choose only a young tender pad). To the rice filling, add enough cheese sauce until it will hold together. Pile this on top of the pads. Top with cheese sauce, and bake in 350 degree oven to heat through.

*Synonomous with *Nopales*, but usually refers to the chopped pads.