



FOR MORE INFORMATION REGARDING THE URSCHER MODEL RA DICER, CONTACT:

URSCHER LABORATORIES, INC.  
P.O. Box 272  
Valparaiso, Indiana 46383 U.S.A.  
Telephone: (219) 464-4811  
Telex: 259 337

*These 'mushroom silhouettes' are perfect for side dishes or snacks. They are made from fresh diced mushrooms.*

## Extruded mushrooms

Made from pieces of fresh mushrooms, these breaded slices offer excellent taste and texture. They also offer improved handling, preparation and portion-control.

Although introduced just a few weeks ago, *Munchrooms* are receiving enthusiastic response in the food industry—including "some serious interest" by at least one fast-food chain.

And no wonder. Although they may never replace whole, breaded mushrooms, these extruded mushroom "silhouettes" offer advantages that cannot be duplicated by whole mushrooms.

Portion control is a good example. Fresh mushrooms are picked in various shapes and sizes, which makes portion-control next to impossible. Extruded mushrooms, on the other hand, are produced with consistent shapes, sizes and weights, so portion-control is considerably simple to achieve.

There are other advantages, too. Unlike whole breaded/frozen mushrooms, *Munchrooms* are pre-fried. This saves time, labor and money. It also reduces waste and cooking time.

"Mushrooms are growing in popularity, and are asked for more and more at the restaurant level—from fast-food to 'white tablecloth' operations," comments Marv Spira, director of operations for processed foods, Produce Products Div., Ralston Purina Co., St. Louis, Mo.

"These products, though not de-

signed to replace whole, breaded mushrooms," he continues, "will enable those who are not presently using mushrooms to be able to use them."

### The extrusion process

According to Spira, the key to the development was being able to extrude a large enough piece of mushroom into a mushroom-shape. "This provides the necessary texture and taste for a good-quality product," he explains, "whereas in previous attempts we couldn't get a large enough piece through the extruder."

Other than that, the extrusion process is similar to that which might be used for shrimp, onions and other food products.

The process begins with freshly picked mushrooms, which are washed, then diced into the proper-sized pieces on an *Urschel* unit. The excellent flavor results from using whole fresh mushrooms, precise quality-control and careful chopping; for these reasons, explains Spira, Ralston does not use "broken" or "trimmed" mushrooms in the extrusion process.

Once chopped, the mushroom pieces are mixed with a matrix—a starch binder, says Spira—in a *Hobart* mixer/blender, then fed into a *DCA* extruder. This unit will form

"mushroom silhouettes" of about half an ounce each—roughly 40 pieces per pound.

The breading applied to the extruded mushrooms is basically the same used for other breaded products, with slight variations in the flavorings. This is mixed in a *Stein* batter/breader, which applies it to the mushrooms. Once breaded, the mushrooms are partially fried, on another *Stein* unit.

Finally, the breaded mushroom silhouettes are flash-frozen in a CO<sub>2</sub> tunnel and packaged for shipping.

Par-frying the extruded mushrooms adds another advantage over whole breaded mushrooms—which are usually breaded and frozen without par-frying.

Par-frying the extruded mushrooms, in essence, "firms up" the breading. This results in less breakage during shipping and handling, less of a tendency for the breading to "peel off" before cooking, and reduced cooking time and less shrinkage during cooking.

To cook the extruded mushrooms, the user simply deep-frys them at 350F for 1½-2½ minutes, or until "golden brown." Then, they are ready for serving—as a complement to steak, chicken, fish, etc; as a side dish with sandwiches or other items; or, as hors d'oeuvres or snacks. ☞