

OVER A DECADE AGO, there was a need identified in the food and beverage industry for improving upon the dried fruit and vegetable products being sourced in the marketplace. Since their introduction in 2012, MicroDried® has taken that mission to heart by providing the best in dried fruits and vegetables.

All MicroDried fruit and vegetable ingredients are produced without any preservatives, additives, fillers, artificial flavors or colors. The company offers a single ingredient with field-to-delivery traceability so that food and beverage manufacturers' end products can be cleanly labeled with just the desired fruits

or vegetables. MicroDried offers innovative ingredient solutions in over 40 different varieties of 100% pure fruit and vegetable products and select organics, and their drying capabilities can be customized by product characteristics including moisture content, texture and piece size.

The company operates a full-scale production facility in Nampa, ID for the production of all MicroDried fruit and vegetable ingredients. This facility is strategically equipped to maximize production efficiencies and food safety using state-of-the-art technologies to ensure product quality at process-critical control points. Their production processes are fully



automated with touchscreen technology from receiving to packaging to shipping, with the capacity to meet the needs of food manufacturers worldwide.

"MicroDried is located in the heart of the Treasure Valley in Nampa, Idaho where the company has been operating for 10 years. All of our blueberries, which is what we're best known for, are grown on our farms in eastern Washington and processed at our IQF facility in Grandview. We then use them at our MicroDried facility in Nampa, so we have 100% vertical integration on all our blueberry products, conventional and organic.", says Heidi Farkas, National Sales and Marketing Manager for MicroDried.

MicroDried is committed to the highest domestic and international certification standards in the industry, and they have earned the highest British Retail Consortium (BRC) rating on every audit since 2013.

Annual plant certifications also include AIB International, Washington State Department of Agriculture's (WSDA) Organic Program, IFANCA Halal, and Orthodox Union (OU) Kosher. MicroDried strives to maintain the highest standards of product quality and food safety in the industry and is dedicated to both transparency and food safety in all operations with full traceability on all

products. All dried fruit and vegetable products offer a clean single-ingredient label, are naturally low in fat, sodium and cholesterol, are non-GMO, gluten-free and allergen-free, and are Products of the USA.

With an ever-increasing number of educated consumers who want the nutritional value from clean and natural ingredient labels, their market demand drives an expansion of potential dried fruit and vegetable applications. The nutritional

benefits of the MicroDried process

are extensive, for the simple reason

that it uses the entire fruit or vegetable - skin, seeds and all.
This means that the profile of vitamins, minerals, protein, fiber, antioxidants, phytonutrients, and other nutritional benefits maintains optimal similarity to the

fresh fruit or vegetable. All MicroDried products offer a clean, single ingredient label with no added sugars, color, preservatives or additives of any kind. These healthy ingredients use the whole fruit and vegetable to maximize antioxidants and phytonutrients.

MicroDried can furnish ingredients in a wide range of particulate sizes from whole pieces, slices/dices, fragments with and without fines, to coarse and fine grind powders. MicroDried can customize the fragment size ranging from 1 to 6.5mm. Many of their ingredients including blueberries, which were the first MicroDried products to be dried using Radiant Energy Vacuum technology, are available in whole pieces as well.

Whole dried fruits and vegetables from MicroDried provide optimal product identity in a variety of foods while maximizing eye appeal, taste and texture. Fruit or vegetable fragments offer strong piece identity in high mixing or custom blending applications, while maintaining durable piece integrity to deliver scattered bits of color and flavor within a recipe. MicroDried coarse grind



powder is a whole fruit powder, so you can actually see the seeds and skins rehydrate which doesn't happen when using a juice powder. Their fine grind powder offers a smoother texture than coarse grind and distributes more color and flavor throughout the finished product.

"One of the areas in which we really see success is in our ability to blend a variety of dried fruits and vegetables. The products are not fragile so, as a result of that benefit, we can deliver a blended product to our customer. So, it's truly a onestep addition for them.", explains

Heidi Farkas.

A key MicroDried advantage comes from offering a significantly reduced microbial load. Starting with IQF product gives more control over microbial loads and overall quality, allowing MicroDried products to have a lower total plate count than comparable dried products. This is critically important for proper food safety, especially in dairy and no-bake applications, and allows us to offer all MicroDried fruits and vegetables as Ready-to-Eat.

"We don't add any other ingredients. While other alternative drying methods may add sugar or juice and then proceed with drying it, our products have a very clean ingredient list – it's just the fruit or just the vegetable.", says Heidi Farkas, "When you compare MicroDried ingredients against other dried options, you find a number of advantages – one of them being the rich color of the fruit or vegetable."

For example, the inside of the blueberry doesn't turn white or pink, which happens when using other drying methods – a

MicroDried blueberry will remain blue

throughout. This color uniformity is especially important if the fruit or vegetable is going to be reduced to very small pieces or a powder. MicroDried





products are sturdy and have better particle integrity than those dried by competing methods. Particle integrity provides another important advantage in many applications, as it makes MicroDried ingredients significantly easier to blend into batters, dairy mixtures and other recipes without breaking down into powder or falling apart while mixing.

But perhaps the most apparent difference between MicroDried ingredients and those dried by other methods are two of the most important aspects of food in general – nutrition and taste. The process preserves many of the natural vitamins, minerals and other nutrients in the fruits and vegetables while retaining superior flavor, texture and color.

There are some distinctive differences that continue to make MicroDried products a preferred choice for food companies when looking for a dried fruits and vegetables vendor/partner.

- Customized moisture levels offer
 the versatility to supply products
 the way they are really needed. This
 gives manufacturers the possibility of
 removing a step on their end to shorten
 process time and increase productivity.
- Two or more fruit and vegetable varieties can be blended to create trendy tastes and new colors - or compounded with

- sweetening or flowability agents as part of the customization process.
- with strong piece integrity in a wide range of sizes, MicroDried is able to deliver more pieces and higher volume of their ingredients. A pound of MicroDried whole cultivated blueberries has 3,500 pieces, while MicroDried blueberry fragments can have more than 10,000 pieces per pound. These results are higher on average when compared to competitive drying processes. MicroDried blueberries have six times the number of pieces and three times more volume than fresh blueberries, as another example.

One of the main selling points of MicroDried's product line is the user-friendly ability to just take the dried fruits and vegetables and start creating with them – as each product is Ready-to-Eat with no extra processing steps, with or without hydrating.

"Our MicroDried products do not require any further processing and can be added directly into your application. Five big advantages realized from using our shelf-stable, Ready-to-Eat products are a higher overall piece count per pound due to removed moisture, superior flavor distribution, piece durability and integrity, rich and natural color, and low microbe levels for added food safety.", says Heidi Farkas.

With the gentle, low heat drying process, MicroDried products retain much of the nutritional value, natural vitamins, minerals and other nutrients. Due to the low water activity, MicroDried products are shelf stable for up to two years making it the perfect add-in for larger manufacturers to keep in their inventory, always ready and available.

"Our revolutionary MicroDried process preserves the natural integrity of our fruits and vegetables, keeping the superior taste, color and texture you want, and allowing us to offer them as Ready-to-Eat. Our MicroDried proprietary patented

drying technology includes a low impact radiant energy vacuum (REV) system for dehydration, which maintains the most natural vitamins, minerals, polyphenols and other nutrients in the fruits and vegetables," says Steve Nugent, Director of IQF, Dried, Export and International Business Development for MicroDried.

The MicroDried process is a gentle drying process that preserves the flavor, color and integrity of the fruit or vegetable while reducing microbes and offering a shelfstable 100% pure ingredient. The process is simple, providing food companies and ingredient manufacturers with the best and purest form of fruits and vegetables in the food industry. Most importantly, MicroDried's unique radiant energy vacuum (REV) process can set moisture according to the demands of the individual end-user's application. The product first goes into an oven that drives out much of the moisture, allowing it to be gently expelled by microwaves. By controlling the vacuum and the microwave energy level, MicroDried can vary the amount of the moisture in the final product. The use of microwaves ensures that the final drying is done with as little heat

"When you use microwave energy under vacuum, you're drying the product evenly, from the core to the outside. MicroDried product moisture ranges from 4% on the low end up to 13% on the high end with low water activity, giving the end user the widest possible range of moisture for any given application. This technology gives us the ability to produce a wide variety of product specifications for our customers," says Steve Nugent, "It's our processing parameters experience and knowledge, knowing how much energy needs to be introduced under

as possible, which preserves the product's integrity and improves

flavor and overall quality.

a certain level of vacuum that will remove a specific percentage of water activity. So MicroDried determines how much energy is required to achieve your targeted moisture content."

"Whatever your application we have the right sized fruit or vegetable to meet your specific needs. Our products are used in all facets or segments of the food and beverage industry – from ready to eat cereals, overnight oats and hot cereals, snack bars, pet foods, meat products and meat alternatives, dairy products, and beverages from energy drinks to beer.", says Heidi Farkas, "Our whole pieces can be used in cereals or trail mixes. Our fragmented

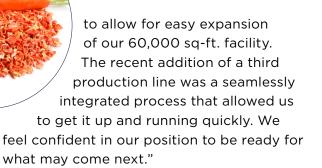


pieces are often used in baked goods where you want a lot of piece identity, or dry mix applications like waffles and pancakes. Our powders can be used in any application where you want to add flavor into every bite."

"We're forecasting growth potential in key products for 2022-2023, but our team is always tracking predicted trends and engaging with our customers and our brokers to hear what they think – get their valuable opinions.

As of right now, we project key growth in berries, citrus, tropicals and vegetables – especially dried veggies for snack items and pet foods – as well as tropicals, citrus, blueberries and cranberries in Europe, and berries and citrus in Asian markets.", says Steve Nugent.

"From the very start a decade ago, MicroDried envisioned the extension of our offerings into multiple types of dried fruit and vegetable ingredients. We have the proper synergies and capabilities in place because we created our infrastructure





For more information, visit microdried.com or call 208-461-5100