

## Three Obstacles to Bioavailability



Large particle size. High-molecular-weight substances have trouble penetrating the small intestine.



Slow transit. Fat-soluble ingredients are slow to absorb in the aqueous environment of the digestive system.



Short half-life. Water-soluble ingredients, though easily absorbed, have a short half-life, so they don't stay in the bloodstream long.

## The MicroActive® Technology Solution

MicroActive technology micronizes and encapsulates the active ingredient in a tailor-made matrix to increase its bioavailability.

For fat-soluble ingredients, a custom matrix is developed to allow for quicker transit through the digestive system so you don't have to wait hours to absorb them. For water-soluble ingredients, a custom matrix is developed to allow for slower transit so they can continue to be absorbed hours after they've been ingested. The result is a sustained-release product that works now — and later!



Small particle size. The active ingredient is micronized, so it can pass through the small intestine easily.



Custom matrix. The custom-tailored matrix efficiently transports the active ingredient through the digestive system.



Sustained release. The matrix releases the active ingredient over time, so blood levels stay consistently elevated.

CoQ10-SR

### Supplement Facts

Serving Size: 1 vegicap	Servings Per Container: 30
Amount Per Serving	% Daily Value
<b>Coenzyme Q10</b> 60 mg CoQ10 as MicroActive® CoQ10 Complex 40 mg as crystalline CoQ10	100 mg †
† Daily value not established.	

Other ingredients: rice flour, beta-cyclodextrin (from non-GMO potatoes) vegetable cellulose, vegetable magnesium stearate.  
MicroActive® CoQ10 is protected under U.S. Patent 7,030,102.

Curcumin-SR

### Supplement Facts

Serving Size: 1 vegicap	Servings Per Container: 30
Amount Per Serving	% Daily Value
<b>Curcumin</b> as MicroActive® Curcumin-SR™ (sustained-release complex) Turmeric root extract ( <i>Curcuma longa</i> )	250 mg †
† Daily value not established.	

Other ingredients: silica, polysorbate 80 (vegetarian) isopropyl myristate, hydroxypropyl methyl cellulose, sodium alginate, vegetable cellulose, vegetable magnesium stearate.  
MicroActive® is a registered trademark of BioActives, LLC.

Resveratrol-SR

### Supplement Facts

Serving Size: 1 vegicap	Servings Per Container: 30
Amount Per Serving	% Daily Value
<b>Resveratrol</b> as MicroActive® Resveratrol-SR™ (sustained-release complex) <i>Polygonum cuspidatum</i> extract (root)	150 mg †
† Daily value not established.	

Other ingredients: hydroxypropyl methyl cellulose, beta-cyclodextrin (from non-GMO potatoes), carnauba wax, vegetable cellulose, vegetable magnesium stearate.  
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## Our Commitment to Clinical Efficacy

Every ingredient validated by human studies.  
Every dosage consistent with clinical research.  
No exceptions. No compromises.

**QOL Labs®**, LLC  
2975 Westchester Ave • Purchase, NY 10577  
914.251.0981 • www.qollabs.com • info@qollabs.com

QOL LABS®

## Unisorb CoQ10™ Sustained-Release MicroActive® CoEnzyme Q10

## Unisorb Curcumin™ Sustained-Release MicroActive® Curcumin

## Unisorb Resveratrol™ Sustained-Release MicroActive® Resveratrol

Increased Bioavailability  
Sustained Release

## It's Not What You Take... It's What You Absorb and Utilize!

Have you ever taken a nutritional supplement, only to wonder if it was actually doing anything? If so, you had reason to worry. Why? Some ingredients are not well absorbed by the body, so they have to be taken in very large amounts to have an effect. Other ingredients are decently absorbed, but have a short half-life, so they don't stay in the system very long.

When choosing a nutritional supplement, it's important to remember:

- Just because an ingredient is swallowed does not mean it will be absorbed
- Just because an ingredient is absorbed does not mean it will be bioavailable

## Absorption versus Bioavailability: What's the Difference?

Absorption: the fraction of an ingested ingredient that is absorbed through the small intestine

Bioavailability: the fraction of an ingested ingredient that actually makes it into systemic circulation

## Introducing the SR Line of Products from Quality of Life®

With Quality of Life's SR (sustained release) line of products, you no longer have to worry if your supplements are working. SR products feature MicroActive® technology, which is clinically documented to increase absorption and enhance bioavailability.

\* These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

## Benefits of MicroActive® Technology

Several human clinical studies have demonstrated that MicroActive technology:

- Increases the bioavailability of the active ingredient
- Is universally absorbed by all subjects (not well absorbed by some and poorly absorbed by others)
- Delivers sustained release, so blood levels of the active ingredient remain high for a longer period of time

## Unisorb CoQ10™

### About Unisorb CoQ10

Found in virtually every cell of the human body, coenzyme Q10 (CoQ10) is a key player in the manufacture of ATP — the body's main source of energy.\* For that reason, CoQ10 helps fulfill the energy demands of the heart, and may preserve cognitive function and reduce post-exercise fatigue.\*

### Obstacles to CoQ10 Bioavailability



**Large particle size.** In regular crystalline form, CoQ10 has a large particle size, making it difficult to penetrate the small intestine.



**Slow transit.** CoQ10 is fat-soluble, so it is transported very slowly through the aqueous environment of the digestive system.

**Fact:** As little as 1 percent of supplemented crystalline CoQ10 makes it into systemic circulation.

### Introducing Unisorb CoQ10

Unisorb CoQ10 features MicroActive Q10, which delivers CoQ10 in a special micronized, sustained-release matrix. Not only does MicroActive Q10 have 3x better bioavailability than regular CoQ10, the CoQ10 is released over 24 hours. That means it stays in the blood longer — and is therefore active longer.

Ingredient	Daily Dose Used in Human Studies	Daily Dose Used in Unisorb CoQ10 <sup>§</sup>
CoQ10	30–300 mg crystalline CoQ10	60 mg MicroActive® CoQ10 plus 40 mg crystalline CoQ10 (providing the equivalent of 220 mg crystalline CoQ10)

<sup>§</sup>Serving size: 1 vegicap • Daily dose: 1 vegicap

## Unisorb Curcumin™

### About Unisorb Curcumin

Curcumin, the active constituent of turmeric, is one of the most promising ingredients for promoting a healthy inflammation response.\* While short-term inflammation is a normal part of the body's immune response, long-term inflammation may increase oxidative stress and contribute to the aging process.

### Obstacles to Curcumin-SR Bioavailability



**Slow transit.** Curcumin is fat-soluble, so it is transported very slowly through the aqueous environment of the digestive system.



**Short half-life.** What little curcumin is absorbed is quickly metabolized and excreted from the body.

**Fact:** Laboratory research indicates that curcumin is cleared from the blood within one hour of administration.

### Introducing Unisorb Curcumin

Unisorb Curcumin features MicroActive Curcumin, which delivers curcumin in a special micronized, sustained-release matrix. Not only does MicroActive Curcumin Complex have 8x better bioavailability than regular curcumin, the curcumin is released over 8+ hours. That means it stays in the blood longer — and is therefore active longer.

Ingredient	Daily Dose Used in Human Studies	Daily Dose Used in Unisorb Curcumin <sup>§</sup>
Curcumin	300–2,000 mg regular curcumin	250 mg MicroActive® Curcumin (providing the equivalent of 2,000 mg of regular curcumin)

<sup>§</sup>Serving size: 1 vegicap • Daily dose: 1 vegicap

## Unisorb Resveratrol™

### About Unisorb Resveratrol

Resveratrol is a phytonutrient and antioxidant that is naturally occurring in grapes and red wine. Human clinical studies have shown that resveratrol supports healthy metabolism, normal insulin sensitivity, and optimal blood flow — all of which may have cardiovascular, brain, and anti-aging benefits.\*

### Obstacles to Resveratrol Bioavailability



**Short half-life.** Resveratrol has a short half life, so it doesn't stay in the bloodstream long.

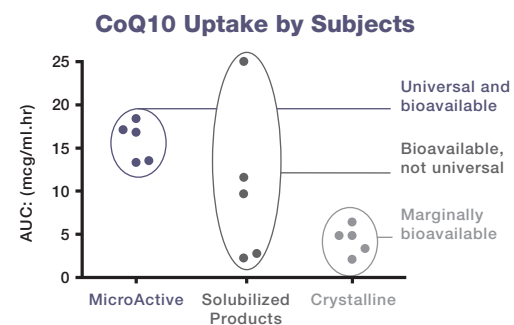
**Fact:** Resveratrol is actually well absorbed, with one study showing an absorption rate of 70 percent. However, since it doesn't stay in the bloodstream long, its benefits may be limited.

### Introducing Unisorb Resveratrol

Unisorb Resveratrol features MicroActive Resveratrol, which delivers resveratrol in a special micronized, sustained-release matrix. Not only does MicroActive Resveratrol have 2.5x better bioavailability than regular resveratrol, the resveratrol is released over 24 hours. That means it stays in the blood longer — and is therefore active longer — than regular resveratrol.

Ingredient	Daily Dose Used in Human Studies	Daily Dose Used in Unisorb Resveratrol™ <sup>§</sup>
Resveratrol	10–270 mg regular resveratrol	150 mg MicroActive® Resveratrol (providing the equivalent of 375 mg regular resveratrol)

<sup>§</sup>Serving size: 1 vegicap • Daily dose: 1 vegicap



For studies on each ingredient, please visit [www.humanclinical.org/](http://www.humanclinical.org/)