

Rebuilding Muscles. Rebuilding Lives.™

# Therapeutic Nutrition Drink Mix

Shown to Support  
Tissue Repair<sup>1</sup> and Help  
Build Muscle<sup>2,3</sup>



## Why is nutrition important in healing?



Adequate nutrition plays a crucial role in healing. The nutritional needs of people who have wounds are greater than normal, and healing may require extra calories, protein, vitamins, and minerals. Drinking enough fluid is also vital because it maintains blood volume, supporting circulation in order to supply nutrients and oxygen to tissues.

- **CALORIES** Calories provide the body with energy. If enough calories are not eaten, weight from muscle and fat is lost. Weight loss makes it harder to heal.
- **PROTEIN** Protein provides amino acids, which are the building blocks of the body. Protein is needed to maintain and repair tissue. Decreased protein intake is associated with wounds, and an increased protein intake is important for wound healing.

- **AMINO ACIDS** Specific amino acids, particularly arginine and glutamine, may also be beneficial for wound healing. Arginine is needed during periods of growth or healing. Arginine regulates many bodily functions, some of which support wound healing and tissue repair. Glutamine is important for tissue repair and during times of stress, such as tissue injury
- **FLUID** Fluid is an essential nutrient that is important for the normal functioning of cells. Dehydration can occur if a person does not consume enough fluid or if fluid losses are greater than fluid intake. Wound drainage can be a major source of fluid loss and can lead to dehydration and electrolyte imbalance.
- **VITAMINS AND MINERALS** Various vitamins and minerals have been associated with healing. Nutritional deficiency has been associated with development of wounds and slow wound healing. Clinicians often recommend increased intake of vitamins and minerals thought to be especially important for healing.

A well-balanced diet should contain everything your body needs to heal a wound or repair tissue. If you are not sure if your diet contains all the nutrients necessary for healing, you might consider asking your doctor, nurse, or dietitian about supplementing your diet.



## Should I be concerned about losing muscle?

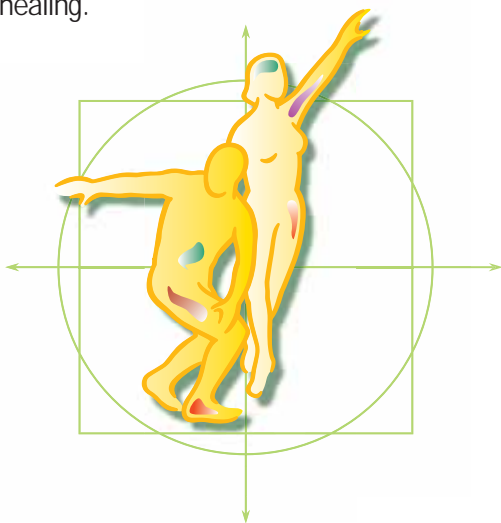


JUVEN® has been clinically shown to help build muscle.<sup>2,3</sup> This booklet explains how just two packets of JUVEN a day as part of a complete, balanced diet may help you improve wound healing.

## What is muscle wasting and why is it a concern if you have a wound?

Muscle wasting is what happens when the body breaks down the proteins in lean body tissue for energy. This causes your body to lose muscle and your organs to work less effectively than they should. Even if your weight stays the same, your body may still be breaking down lean tissue for energy.

Loss of muscle and organ tissue can make it harder for you to stay active and to get better during or after an illness. The effects of muscle wasting are serious and can affect quality of life. Maintaining muscle and organ tissue is vital for proper wound healing.



## What is JUVEN® and how can it help?

JUVEN is a therapeutic nutrition drink clinically shown to help build muscle<sup>2,3</sup> and support wound healing.<sup>1</sup> JUVEN contains a patented blend of three key ingredients—HMB, arginine, and glutamine. These three components are naturally found in a healthy body.

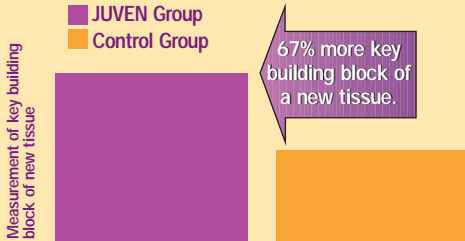
- HMB (beta-hydroxy-beta-methylbutyrate) helps muscle cells maintain cell strength and structure. HMB may also help support immune function
- Arginine is an amino acid that is key for building muscle and for promotion of wound healing
- Glutamine is an amino acid that helps cells produce the building blocks they need for new tissue, and is key for building muscle

By working together, these three ingredients help support wound healing and slow the breakdown of protein in muscle.

JUVEN helps build muscle without fat gain <sup>1,4</sup>	JUVEN supports the immune system <sup>1</sup>
JUVEN supports healing <sup>5</sup>	JUVEN is an excellent source of calcium

## JUVEN® has been clinically shown to support healing.<sup>1</sup>

The JUVEN Group had 67% more of a key building block\* of new tissue than the control Group\*\*



\*Hydroxyproline

\*\*Control group did not receive any of the ingredients in JUVEN.

## JUVEN Enhanced Collagen Formation In As Few As 2 Weeks<sup>1</sup>



## How do I know if I need JUVEN®?

A balanced diet with the right amount of calories, protein, vitamins, and minerals may not be enough to help your body heal. JUVEN is a therapeutic nutrition drink mix scientifically formulated with three key ingredients shown to promote healing. These three compounds are naturally found in a healthy body.



## How long should I take JUVEN?

Two packets of JUVEN a day can support wound healing and protein synthesis—a key step in building muscle. Talk with your health care professional to see how long you should use JUVEN. .



## How do I prepare JUVEN?

Mix one packet with 8–10 fl oz of cold water or fruit juice, stir until the powder is dissolved, and enjoy! If you mix JUVEN ahead of time, refrigerate it in a clean, covered container for up to 24 hours.

## How many calories are in JUVEN?

When mixed with water, each packet of JUVEN has 75 Calories; two servings a day provide 150 Calories. There will be more calories if JUVEN is mixed with juice or other beverages that contain calories.

## What does JUVEN taste like?

JUVEN is a light, refreshing drink mix that is available in orange and grape flavors.

## Does JUVEN need to be taken with food?

You can drink JUVEN on an empty stomach, but drinking it with breakfast and dinner is an easy way to remember to take your two daily servings. Because JUVEN does not have all the nutrients your body needs, use it as part of a well-balanced diet.



## Should I take other supplements with JUVEN®?



You must eat a well-balanced diet to get the best results from JUVEN. If you cannot eat a well-balanced diet, talk to your health care professional to see if you should use a medical nutritional product such as Ensure® or other supplements such as multivitamins.

## Does JUVEN have any side effects?

JUVEN does not usually cause side effects. However, any change in the diet can cause temporary gastrointestinal (GI) symptoms, such as diarrhea or constipation. If you have GI symptoms, you can reduce them by drinking less JUVEN or by adding more water to it. If you have any unusual problems, stop using JUVEN and talk to your doctor.



## References

1. Williams JZ, Abumrad N, Barbul A: Effect of a specialized amino acid mixture on human collagen deposition. *Ann Surg* 2002;236:369-375.
2. May PE, Barber A, D'Olimpio JT, et al: Reversal of cancer-related wasting using oral supplementation with a combination of  $\beta$ -hydroxy- $\beta$ -methylbutyrate, arginine, and glutamine. *Am J Surg* 2002;183:471-479.
3. Clark RH, Feleke G, Din M, et al: Nutritional treatment for acquired immunodeficiency virus-associated wasting using beta-hydroxy-beta-methylbutyrate, glutamine, and arginine: A randomized, double-blind, placebo-controlled study. *JPEN* 2000;24:133-139.

JUVEN® is a product of the Ross Products Division of Abbott Laboratories. Ross Products is a long-time leader in the United States nutritionals marketplace and is well known for leading brands such as Similac® infant formulas and Ensure® adult nutritional products. For more information, visit the Ross Web site at [www.ross.com](http://www.ross.com).

# Where can I buy JUVEN<sup>®</sup>?

- Rite Aid, Longs Drugs, and Duane Reade<sup>®</sup> pharmacies
- Visit [www.JUVEN.com](http://www.JUVEN.com)
- Call 1-877-GO-JUVEN (1-877-465-8836)
- Ask your pharmacist to order JUVEN for you

JUVEN may be a qualified medical expense under your Health Savings Accounts (HSA) when prescribed by a physician for treatment of a specified disease or medical condition, such as cancer. If you have a Flexible Spending Account (FSA), contact your benefits administrator for more information on how you may be able to purchase and receive reimbursement for JUVEN through your account.

**Use JUVEN under medical supervision  
and as part of a complete, balanced diet.**

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