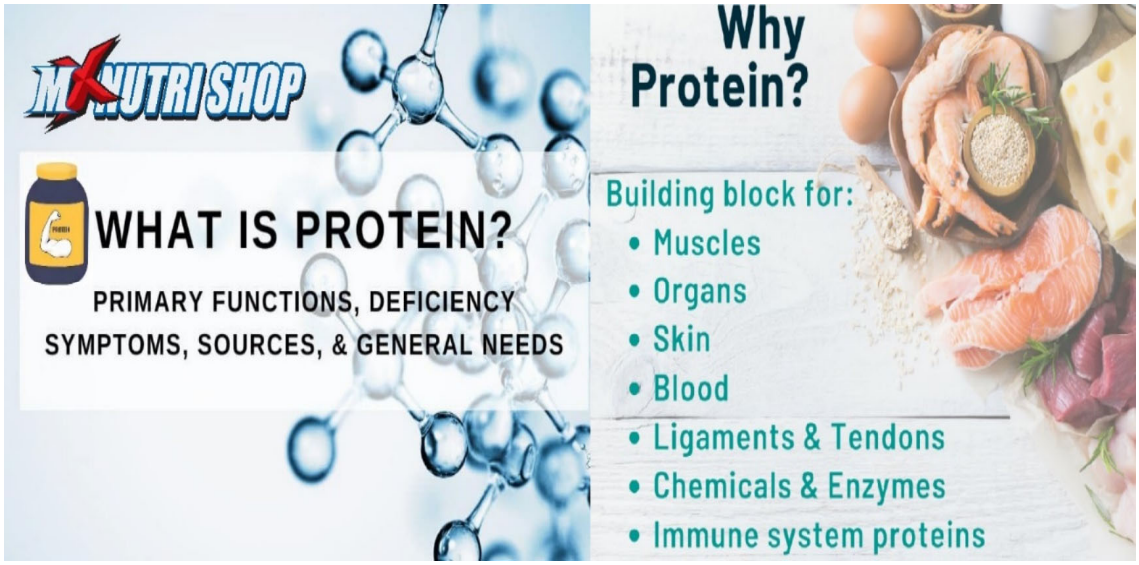
Sports Nutrition Guide

You should always prioritize a balanced daily diet with the right sources and ratio of PFC (Protein, Carbohydrates and Fat) due to your goal, getting the knowledge as well considering supplements you can't get from your nutrition primary sources to enhance performance, recovery, and overall health!

Nutrition is considered the primary foundation for your performance to reach your objectives. Daily balanced meals, Pre, During and Post-workout nutritional recommendations are fundamental to the effectiveness of recovery and adaptive processes.

It is important to study and understand nutritional strategies as well as to get sport nutrition knowledge as a guidance to incorporate in training planning. Hopefully this Basic Guide is going to give some advice to step on and help you to build your nutrition program as well know the right ingredients to select our original Smoothies, Bowls or Waffle, and find the right Supplement in our store!


SPORTS NUTRITION GUIDELINES
FOCUS ON THE FUNDAMENTALS OF SPORTS NUTRITION TO ENHANCE YOUR PERFORMANCE
CARBOHYDRATES
Consume 45-60% of your daily energy intake from carbs to fuel performance.
HYDRATION
Wake up, get hydrated, stay hydrated. Match fluid intake to climate & activity levels.
MEAL TIMING
3-6 meals/snacks per day. Bias carbs around the peri-workout window.
PROTEIN
PROTEIN INTAKE
1.6-2.4 g/kg per day. Bias intake of HBV sources and consume across 3-6 serves.
FOOD CHOICES
Choose an appropriate volume/composition of food to minimise GI discomfort.
D
DEFICIENCIES
Identify nutrients at risk of deficiency due to dietary preferences and lifestyle.
MX NUTRI SHOP


MX NUTRI SHOP
WHAT IS PROTEIN?
PRIMARY FUNCTIONS, DEFICIENCY SYMPTOMS, SOURCES, & GENERAL NEEDS
Why Protein?
Building block for:
• Muscles
• Organs
• Skin
• Blood
• Ligaments & Tendons
• Chemicals & Enzymes
• Immune system proteins

BENEFITS OF PROTEIN DAILY INTAKE

Protein is essential for various bodily functions, including muscle maintenance, immune system support, and hormone regulation. Here are some key benefits of maintaining a daily protein intake:

Muscle Maintenance: Protein is crucial for muscle growth, repair, and maintenance, especially for those who engage in physical activity or strength training.

Immune System Support: Protein helps in the formation of immune cells and plays a role in the immune response, making it vital for overall health.

Hormonal Regulation: Protein-derived hormones regulate growth, energy balance, and immune function, contributing to overall health and well-being.

Weight Management: Protein can help reduce appetite and manage hunger levels, aiding in weight management and preventing overeating.

Incorporating a balanced diet with adequate protein intake can lead to improved health outcomes and support various aspects of human health.

Protein is one of three macronutrients, along with fats and carbohydrates. It's one of your body's key building blocks, as it plays an important role in supporting your cells, organs, and tissues.

The American College of Sports Medicine as per "Dietary Guidelines for Americans 2020 to 2025 Trusted Source" recommends adult females consume at least 46 grams (g) of protein per day and adult males 56 g.

These numbers are to help prevent protein deficiency, but some people may benefit from a higher protein intake.

Here are 10 science-based reasons to eat more protein.

1. Reduces appetite and hunger levels

Eating more protein may help reduce your appetite and manage your hunger levels. This means you may be able to consume fewer calories than if you were eating higher portions of carbohydrates and fats.

Protein's satiety effects are partly due to its effects on several hormones that control hunger and fullness signals in your body.

A 2020 research review found that protein reduced levels of ghrelin, also known as the "hunger" hormone. Protein also increased levels of cholecystokinin and glucagon-like peptide-1 (GLP-1), two hormones responsible for digestion and signaling fullness.

The effects of protein on appetite and hunger management have also been shown to be key contributors to weight management.

If you have a goal of losing weight, consider replacing some of your carbs and fats with high protein foods, such as lean meats, yogurt, beans, fish, and nuts; as well using Whey or Egg Protein supplements.

2. Increases muscle mass and strength

Protein is the building block of your muscles. Eating adequate amounts can help maintain muscle mass and promote muscle growth during strength training.

A 2022 review of 74 studies found that the daily protein requirements in grams for increasing lean muscle mass may vary depending on age groups:

Older than age 65 years: 1.2 to 1.59 g per kilogram of body weight (g/kg/bw)

Younger than age 65 years: 1.6 g/kg/bw

Keeping protein intake high may also help prevent muscle loss during weight loss.

Let's learn more about how much protein you should eat daily for muscle growth!

How much protein you need to build muscle can depend on your weight, activity level, and age. Eating too much may have some risks.

The current recommended dietary allowance (RDA) is 0.8 grams of protein per kilogram of body weight.

Endurance or strength athletes should take 1.2 to 2 grams of protein per kilogram of body weight daily.

Muscle protein breaks down in the human body. Consuming more protein is essential to rebuilding — and even building more — muscle.

How much should you be consuming? That depends. Here's what the research, health experts, and guidelines say.

"A person weighing 140 pounds needs [at least] 51 grams of protein per day, and another person weighing 200 pounds needs [at least] 73 grams of protein per day," this number equates to about 10 to 35% of our daily recommended caloric intake.

How much protein you need varies by age

"Older adults [around ages 65 to 70] should eat a little more, roughly 1 gram per kilogram or -.45 gram per pound of body weight because they don't absorb quite as well and are more prone to muscle loss and bone fractures."

Physical activity may affect protein intake

Some athletes also may require more to support their training regimen and physical activity. A 2016 position statement from the American College of Sports Medicine recommended the following guidelines for protein intake among physically active individuals:

Physically active people take in 1.2 to 2 grams of protein per kilogram of body weight or 0.5 to 0.9 grams per pound of body weight, whether they are endurance or strength athletes. Whether protein is consumed at the high or low end of these recommended amounts should be based on intensity of exercise or calorie restriction.

Athletes should consume 0.25 to 0.3 grams of protein per kilogram of body weight no more than two hours post-exercise to increase muscle.

I noted that athletes who consume 2 grams of protein per kilogram of body weight should do so under the guidance of a medical professional to ensure the body, particularly the kidneys, continues to function optimally. "This is because the kidneys have to work harder to eliminate the waste by-products from protein metabolism."

How much protein is too much?

I recommend consuming no more than 1.3 grams of protein per kilogram of body weight daily.

When you consume more protein than needed, your body may store the excess calories as fat. Consuming too much protein — over 2 grams per kilogram of body weight daily — may come with risks, such as un unwanted weight gain.

In addition, people living with or at risk of kidney disease may also experience azotemia (kidney malfunction).

A 2020 study Trusted Source indicates that high protein diets did not increase kidney or bone health risks but called for longer clinical trials.

However, as per latest research, a high protein diet was classified as 1.07–1.60 grams of protein per kilogram of body weight, not 2 grams.

Additionally, Best noted that people consuming too much protein for their weight and activity level may experience the following: irritability, dehydration, fatigue, nausea.

Great sources of protein

"The best, or healthiest, sources of protein are those from lean animal meats or plants," Best said. These include:

Poultry (3 oz. of turkey contains about 25 grams of protein Trusted Source)

Fish (3 oz. of salmon contains about 22 grams of protein Trusted Source)

Eggs (one large hardboiled egg contains about 6 grams of protein Trusted Source)

Plant-based proteins, like beans, tofu, and lentils, provide an alternative for vegetarians and vegans, but these sources are not always equivalent.

"There are 20 amino acids, nine of which are essential, meaning they are required to be taken in through the diet because the body cannot make them," Best said.

"Animal proteins have these nine already, which makes them complete proteins. However, not all plant sources are complete proteins."

That doesn't mean they aren't beneficial or that you need to consume animal-based proteins to get adequate amounts to build or maintain muscle and overall health. You may just need to combine several sources of protein to keep the necessary amount.

"This sometimes means you'll have to combine plant foods to get all nine essential amino acids. For instance, rice and beans combine to make a complete protein while quinoa is a complete protein in itself," Best said.

What about all those protein bars? Be careful about the grams of sugar!

I'm more amenable to powders, particularly whey, for athletes needing more protein. But I caution that everyone should refrain from being hyper-focused on protein for strength and overall health. "People get stuck on protein sources and forget that they are not getting adequate calories from other sources," also check adding complex carbohydrates and healthy

fat beside the protein source.

Does protein intake affect muscle mass?

A 2022 meta-analysis of 69 studies suggested sticking to the lower end of the position statement's recommendations.

Based on previous research, authors indicated that eating 1.5 grams of protein per kilogram of body weight, which equates to 0.7 grams of protein per pound, should be enough to build strength when combined with resistance training. The point about resistance training is a reminder that muscle mass is not simply a product of protein intake.

"If someone wants to build more muscle, they need to up the intensity of their strength training — higher weights, higher reps, or both — and break down their muscle fibers. Then, they need to eat a healthy diet."

In addition, a 2022 systematic review and meta-analysis Trusted Source of protein intake in healthy adults suggested that 1.6 grams of protein per kilogram of body weight per day could help individuals under 45 years old increase body mass slightly. People older than 45 only saw marginal increases.

A 2020 systemic review and meta-analysis of previous randomized control trials indicated that upping daily protein intake by up to 3.5 grams per kilogram of body weight over the course of several meals could help people grow or maintain muscle mass.

What happens when you don't eat enough protein?

Even in developed countries like the United States, research suggests that many people are still not getting enough protein.

Inadequate protein intake decreases muscle mass and strength. According to Rose-Francis, other signs of protein deficiency may include weakened immune system, malnutrition, edema due to fluid imbalance, hair thinning.

Takeaway

Protein is key for muscle growth and maintenance, but consuming too much protein may pose health risks.

The minimum recommendation for daily protein intake is 0.8 grams per kilogram of body weight, but most people need more, especially if they exercise regularly.

3. Good for your bones

Many studies indicate that protein, including animal protein, has major benefits for bone health.

A 2022 review of 1,570 participants aged 68 to 75 years found that increased protein intake played a significant role in improving bone density. Animal protein provides more benefits than plant proteins.

Research also suggests that protein intake combined with resistance training is important as you age. This could help you maintain bone mass, lowering the risk of osteoporosis and bone fractures. This is also especially important for people experiencing menopause or those who have an eating disorder.

4. Reduces cravings and desire for late-night snacking

Food craving is different from normal hunger. It's not just about your body needing energy or nutrients, but your brain needs a reward.

Yet, cravings can be hard to control! This may be because people usually eat ultra-processed, high sugar foods when they have cravings. These cause a quick dopamine spike but are just as quickly digested, so the brain soon wants more.

An older 2010 study in men with overweight showed that increasing protein to 25% of calories reduced cravings by 60% and the desire to snack at night by half.

Likewise, a 2014 study in adolescent girls with overweight found that eating a high protein breakfast reduced cravings and late-night snacking. This may be mediated by an improvement in the function of dopamine, one of the main brain hormones involved in cravings and addiction.

5. Boosts metabolism and increases fat burning

Your body uses calories to digest and utilize the nutrients in food; a process referred to as the thermic effect of food (TEF).

Some foods require more calories to digest, which increases the TEF and, therefore, the number of calories you burn. Of all three macronutrients, protein has the highest TEF:

Protein: 20% to 30%

Carbs: 5% to 10%

Fats: 0% to 3%

A 2018 review also found that a high protein intake can boost your basal metabolic rate (BMR), which is the number of calories used to perform basic functions, such as breathing.

Protein also contributes to a higher sleeping metabolic rate, which is the number of calories you burn during sleep.

6. Lowers your blood pressure

High blood pressure (hypertension) is a major cause of heart attacks, strokes, and chronic kidney disease.

Some research suggests that higher protein intake may help lower blood pressure.

For instance, a 2023 study found that higher protein intake was associated with lower blood

pressure. Participants with a higher protein intake were also less likely to have hypertension. Similarly, a 2010 review of 40 studies found that increased protein lowered systolic blood pressure by 1.76 mm Hg on average and diastolic blood pressure by 1.15 mm Hg.

7. Helps maintain weight loss

The most important aspect of losing weight is the ratio of calories in compared to calories out. **In other words, you'll want to consume fewer calories than you burn – or expend – each day. This is called a calorie deficit!**

Increasing your protein intake is a key component of your weight loss journey because it could help: boost feelings of fullness, reduce feelings of hunger, boost metabolism, maintain or increase fat-free muscle mass.

Eating a high protein diet can also help you maintain weight loss and prevent weight regain.

8. Does not harm healthy kidneys

Many people claim that a high protein diet can harm your kidneys. However, a low protein diet is only recommended for people with certain health conditions.

According to the National Kidney Foundation (NKF), a low protein diet is only recommended for people with chronic kidney disease who are not on dialysis.

In chronic kidney disease, the kidneys don't function properly, and a high protein diet can make the kidneys work harder. Dialysis is a type of treatment that helps your kidneys filter and purify blood.

If you have chronic kidney disease and are on dialysis, the NKF recommends increasing your protein intake to the recommended daily requirements.

If you don't have kidney disease, it's important to consume the minimum daily requirement of protein to prevent health complications.

9. Helps your body repair itself after injury

Protein can help your body repair after it has been injured.

According to a 2022 review, protein plays a key role in the growth, renewal, and healing process in your cells, making it the building blocks of your tissues and organs.

Protein also plays an important role in exercise recovery. Research suggests that it could help your muscles recover, repair, and regrow, which can contribute to building lean muscle mass.

10. Helps you stay fit as you age

As you age, your muscles tend to gradually weaken, affecting their strength, function, and mobility.

The most severe cases of muscle loss are referred to as age-related sarcopenia, which is one of the main causes Trusted Source of frailty, bone fractures, and reduced quality of life among older adults.

Increasing your protein intake is one of the best ways to reduce age-related muscle deterioration and prevent sarcopenia. Aim for at least 1 to 1.2 g/kg/bw per day.

Staying physically active is also crucial, and lifting weights or doing some sort of resistance exercise can work wonders.

Frequently asked questions

Which food is highest in protein?

Some foods that are high in protein include:

Animal foods: chicken, fish, turkey, Greek yogurt, eggs, tuna, dairy, beef, and a complement of Whey and/or Egg Protein supplement.

Plant-based foods: beans, nuts, soy products, lentils, and edamame

How do you know if you have protein deficiency?

Some symptoms of protein deficiency may include edema, hair loss, brittle nails, muscle weakness, reduced muscle mass, and slower wound healing time.

Get a personal task to measure yourself how many grams of protein you are taking from food and supplements or speak with a healthcare professional if you think you have protein deficiency. They could help develop a plan to increase your protein intake!

The bottom line

Protein is a macronutrient that plays a key role in the function and structure of your cells, tissues, and organs.

Eating a high protein diet could help you manage your hunger and cravings, strengthen your bones, and help your body heal after injuries.

Current dietary guidelines recommend that adults consume 10% to 35% Trusted Source of their calories from protein, which is enough to prevent protein deficiency.

That said, speak with a Personal trainer with experience in nutrition or directly to a nutritionist if you're finding it difficult to incorporate enough protein into your diet. They could help develop a plan for you!

How Much Fat Should You Eat Daily? A Guide to Healthy Fat Intake

A few years ago, someone created the tagline that took over the diet world—"you are what you eat." People were quick to use it to demonize food groups. And the one that took the hardest hit was fat.

Since then, the discussion around fat has been anything but balanced. From people who want to cut it out entirely to those on keto, getting over 60% of their calories from fat, the debate around this topic is ever so strong. So how much fat should you eat daily? What's a healthy balance? Let's dive into this topic.

What is fat, and why do we need it?

Fat is one of the three macronutrients in your diet, along with carbohydrates and protein. It is more commonly associated with animal products, but plant-based foods can also give you plenty of fats.

You're used to hearing bad things about it—but what are its benefits?

Fat is an incredible source of energy. One gram has 9 calories, while one gram of carbs has only 4. If you're on a diet counting calories, that may sound bad. But calories are energy for the body, so fat can have a very energizing effect.

Fat helps with the absorption of certain vitamins. While many vitamins and minerals are water-soluble, some are fat-soluble. Examples include vitamins A, D, E, and K. Without fat, your body will have a hard time processing these vitamins, which puts you at risk for deficiencies.

Studies show fat is essential for hormones and gene regulation. Extremely low-fat diets, for instance, may lead to irregular or absent ovulation and amenorrhea.

Fat also plays an essential role in brain function, including mental health issues like depression and anxiety. A 2016 study had participants alternate between a low-fat diet, two diets rich in fats, and a control diet with balanced nutrients. Results showed participants had positive affect scores and were less irritable when eating one of the high-fat diets.

One thing is clear: fats are not all bad. But all the claims about the connection between fat and heart disease and obesity are not entirely false either. As with all things diet-related, moderation is key. But when talking about fats, their type plays an even more significant role. Some of them you want on your plate all the time, and others you should avoid as best as you can!

Monounsaturated fats

These are found mostly in plant-based foods, such as:

Avocados, Nuts and nut butter, Seeds (Served at MXNUTRISHOP)

Olives and Olive oil.

These are the fats you want in your diet as often as possible, and studies link them to a decreased risk of diabetes and heart disease. **Diets high in these fats can lower blood sugar levels, triglycerides, and blood pressure.**

Polyunsaturated fats

These are also healthy fats in nuts, seeds, olive oil, and fish. Omega-3 and omega-6 fatty acids are polyunsaturated fat, and as you may already know, they have many health benefits.

They help fight inflammation and heart disease, boost brain function, improve mood, and more. Fatty fish is your best source of omega-3s, but if you don't like it, have an allergy, or are vegan, supplementing can also help. **Flax seeds, chia seeds** (Served at MXNUTRISHOP)**, and walnuts** are vegan alternatives that contain plenty of omega-3s as well.

Omega-6 is easier to get, as you'll find it in sunflower, canola, and soybean oil. They're not as healthy as omega-3 and can cause inflammation if eaten in excess.

Ideally, you want to balance the two, trying to get more omega-3 than omega-6 or at least a 1:1 ratio. Sadly, the standard diet will give you a ratio of up to 17:1 in favor of omega-6.

Saturated fat

You'll find this type in animal products such as meat and dairy and more rarely in plant-based products such as coconut oil. They're not all unhealthy. In fact, they may be better for cooking than polyunsaturated fats, which can be damaged at high heat.

But, with few exceptions, such as people with health conditions that may benefit from a keto diet, these fats shouldn't make up most of your diet.

Their downsides are the ones you're already familiar with. They may raise cholesterol levels and, with them, increase your risk for heart disease. In excess, they may also cause you to gain weight.

Do they have any benefits? Yes, they do. Saturated fats may positively affect your metabolic health, and some studies even suggest they don't contribute to heart disease as much as previously thought.

The bottom line? Having some saturated fats in your diet is okay, but don't make them your staple.

Trans fats

The last type of fat is also the one you want to avoid. Trans fats are primarily artificial, created through a process called hydrogenation used to turn liquid fats into solids. This process has been banned in the US, but you can still find trans fats in highly processed foods.

Some of them can occur naturally in meat or dairy, but the ones you'll find in processed foods are anything but natural.

Why are they so bad? Because they raise LDL ("bad") cholesterol while lowering HDL ("good") cholesterol. They can also increase inflammation, lead to insulin resistance, impair artery function, and they'll "help" you gain belly fat.

How much fat should you eat daily?

The answer depends on several factors, such as your diet, any medical conditions, goals, and the types of fats.

For example, according to the American Heart Association, **you shouldn't eat more than 5-6% saturated fats daily. For a standard 2,000-calorie diet, that's about 13 grams.**

In general, for someone healthy, without any health conditions or particular goals other than staying healthy, **you'll want about 20%-35% of your calories to come from fat. Most of them should come from monounsaturated and polyunsaturated fats.**

Beyond this general recommendation, there are other factors involved. Do you have a health condition that requires you to limit fat? In this case, you'll need to talk to a doctor to determine how much fat you can eat each day.

Or are you on the opposite spectrum, suffering from a condition such as epilepsy that could benefit from a high-fat diet? In this case, keto might be good for you, but again remember to talk to a doctor first.

A word on low-fat diets

A diet is considered low in fat if fewer than 20% of your daily calories come from fat. Some diets take it to the extreme, allowing only 5-10% maximum.

These diets have some benefits, but they also come with many risks.

Regarding benefits, studies show they may help with heart health or diabetes. This is especially true in those who are already suffering from issues like high cholesterol or triglycerides.

Extremely low-fat diets may also help people with multiple sclerosis (MS). One study started in 1948 followed the evolution of 150 people with MS for 50 years.

The results showed that those who adhered to the low-fat diet saw slower disease progression. By the end of the study, 31% of those who had followed the diet had died, as opposed to 80% from the group who hadn't.

Beyond specific conditions, though, an extremely low-fat diet has few benefits, is hard to stay on, and puts you at risk for depression and anxiety. Your body may also have difficulty absorbing fat-soluble vitamins, which can come with deficiencies and other health issues.

The bottom line

"You are what you eat" is not an all-encompassing truth. And it is certainly false when it comes to fat.

This demonized macronutrient can be very healthy when eaten in moderation. Fats from plant-based sources or fatty fish are the best; you can include them on your plate daily.

Saturated fat, which comes from animal products, should be rarer in your diet. You don't need to take it out entirely unless you have a medical condition requiring a low-fat diet or at least avoiding animal products.

If you're healthy and eat a whole foods diet, you can get as much as 20-35%, not more than 40% of calories from fats. Otherwise, adapt according to your body's needs and talk to a nutritionist when in doubt.

Are you learning something new from this guideline? Leave a comment at MXNUTRISHOP and Help us spread the knowledge by sharing it with your friends!

Carbohydrate recommendations can be different for each person. If you are a healthy, insulin-sensitive Cross Fitter, your body may be better adapted at utilizing glucose for fuel without any negative effects. Some individuals may fall into the category of being insulin resistant or having metabolic syndrome. These individuals have a very difficult time utilizing sugar for fuel and need to utilize a lower carbohydrate plan that allows them to burn ketones/fat for fuel. There are also many people in between on the carbohydrate spectrum! There are exceptions to every rule mentioned.

Basic Key Takeaways

The number of carbs you need to eat per day varies from person to person and depends on your activity level, health history, lifestyle, and goals.

Aim to consume 45% to 65% of your total daily calories from carbohydrate sources to support a healthy, balanced diet associated with health benefits.

Within a weight-loss diet, prioritize fiber-rich carbohydrates, like whole grains, fruits, vegetables, and legumes, and limit processed carbohydrates and added sugar sources.

Carbohydrates are sugar molecules that the body breaks down for energy. The number of carbs you need per day to gain or lose weight varies depending on your health goals, activity level, and medical history.

How Many Carbohydrates Do You Need?

As mentioned above, there is no one-size-fits-all amount for daily carbohydrate needs. Basic Guidelines are as follows:

The Acceptable Macronutrient Distribution Range (AMDR) recommends that carbohydrates make up 45% to 65% of daily calories, providing essential nutrients to lower chronic disease risk. A 2,000-calorie diet would have 225 to 325 grams (g) of carbohydrates per day.

The Recommended Dietary Allowance (RDA) is 130 g of carbohydrates per day based on a 2,000-calorie-per-day diet. The RDA is the amount of a nutrient necessary to meet the needs of nearly all healthy individuals of a specific sex and age. It reflects how much carbohydrates are needed to provide your brain with sufficient glucose. Glucose is typically the brain's preferred energy source.

Fiber is the nondigestible part of carbohydrates that supports health benefits such as blood sugar control, cholesterol reduction, gut health, and weight management. The Institute of Medicine (IOM) recommends 14 g per 1,000 calories—about 28 g daily on a 2,000-calorie diet.

What Factors Affect Daily Carbohydrate Needs?

Activity Level

More active individuals needing more carbohydrates:

Sedentary needs: 3 to 5 g per kilogram (kg) of body weight per day (g/kg/day); for example, about 184 to 307 g for a person weighing 135 pounds.

Athlete needs: 5 to 12 g/kg/day, depending on intensity and training cycle

General training: 5 to 7 g/kg/day, or about 307 to 430 g for a person weighing 135 pounds.

High-intensity training: 8 to 10 g/kg/day, or about 491 to 614 g for 12 hours per week of moderate to high-intensity training.

Individual variation: Depending on your training regimen, activity, and goals.

Body Composition

Carbohydrate intake affects body composition, but the evidence yields mixed results on how.

Higher carb intake: Linked to increased lean mass and lower trunk fat in women in some studies (e.g., in Korea or Japan). **The average carbohydrate intake was 69.7%, higher than the AMDR in the United States.**

Low-carb diets: They may cause greater lean body mass loss than balanced diets. However, replacing some carbohydrates with protein instead of fat limits unfavorable changes to lean body mass, a low-carb diet still promotes more muscle loss.

Carbohydrate type: Simple sugars (e.g., sugary drinks) may promote weight gain, while high-fiber, plant-based carbs tend to support weight and fat loss.

Recommendation: Regardless of your body composition, aim for 45–65% of daily calories from carbohydrates (AMDR).

Blood Sugar

If you have diabetes, your healthcare provider will work with you to determine how many carbs you should eat per day based on your blood sugar levels, lifestyle, and medications. Other considerations include:

ADA guidance: The American Diabetes Association's Standard of Care does not specify a specific carb amount. Instead, it encourages individualized plans prioritizing minimally processed, nutrient-dense, high-fiber carbs.

Carb restriction: In the short term, it may lower blood sugar and hemoglobin A1c (a measure of average blood sugar over a few months). However, it is often unsustainable and has minimal long-term benefits over less carb-restricted diets.79

Carbohydrates: They provide essential energy and support bodily functions; prioritize whole, high-fiber foods over simple carbs.

Adjustment: Adjust your portions based on your healthcare provider's recommendations, blood sugar data, and medication.

Despite differences in energy metabolism between males and females, research does not support sex-specific guidelines for carbohydrates, provided you eat enough food (calories).

Good vs. Bad Carbs

There are really no such things as "good" or "bad" carbohydrates. However, they can be classified into two groups: simple and complex carbohydrates.

What Are Simple Carbs?

Definition: Simple carbohydrates—popularly considered "bad" carbs—are sugars and the most basic carbohydrate. However, it's important to remember that simple carbs can be safely integrated into your diet, depending on your needs.

Digestion: Simple carbohydrates are rapidly digested, sending a burst of energy (sugar or glucose) into your bloodstream.

Simple carbs include the following foods:

Candy, Desserts, Processed foods (like crackers, chips, breakfast cereals, and granola bars), Regular soda, Molasses, Syrups, Sugar (white, brown, date, coconut), Refined breakfast cereal, Fruit drinks.

Note: While fruits, vegetables, and milk contain simple carbohydrates, they are not considered "bad" carbs.

What Are Complex Carbs?

Definition: Complex carbohydrates—typically considered “good” carbohydrates—contain multiple simple sugar molecules linked together. They include starches and fiber. Your body cannot digest fiber, which helps you feel full and provides many health benefits.

Digestion: Complex carbohydrates take longer to digest because the body must break them down into individual sugar molecules for use.

Complex carbs include the following foods:

Fruits, Legumes (like beans, lentils, and peas), Starchy vegetables (like potatoes, peas, and corn), Whole grains (like bread, cereal, pasta, crackers, and rice).

Does Eating Less Carbs Support Weight Loss?

You do not need to remove all carbs from your diet to support weight loss:

Low-carb definitions: What constitutes a low-carb diet varies. Typically, it is 50–130 grams per day, but very low-carb, ketogenic diets are under 50 g per day.

Weight loss comparisons: Studies show that low-carbohydrate diets affect weight loss similarly to calorie-equivalent balanced diets or calorie-restricted, low-fat diets. This effect is especially pronounced when looking at long-term weight loss.

Diet quality: Diet quality, rather than the quantity of carbs, may more significantly affect weight loss.

Other Nutrition Considerations for Weight Loss

To support weight loss:

Balanced diet: Carbohydrates are not the only focus—protein, fat, and fiber are also essential for weight loss and overall health.

Protein (AMDR): 10% to 35% of daily calories (about 50 to 175 g) should come from protein; the RDA is 0.8 g/kg/day—about 46 g for adult females and 56 g for adult males.

Fat (AMDR): 20% to 35% of daily calories (about 44 to 77 g) should come from fat.

Macronutrient balance: Reducing carbs may affect your intake of protein and fat.

Muscle preservation: A moderate-carb, slightly higher-protein diet may help maintain muscle mass.

High-fat swaps: Replacing carbs with high-fat foods may not support long-term weight loss.

Recommendation: Focus on a nutrient-dense, minimally processed, and balanced diet that includes protein, fat, and carbohydrates within the ranges as recommended in this guideline.

What Happens If You Do Not Get Enough Carbs?

If you do not get enough carbs, you may experience the following symptoms:

Low energy and fatigue, Impaired bowel function, leading to abdominal discomfort, bloating, constipation, and nausea. Bone mineral loss, Elevated cholesterol (hypercholesterolemia), Issues with nervous system functioning, Increased risk of kidney stones.

Things to keep in mind when considering your carb intake:

Medical guidance: Consult your healthcare provider before starting a very low-carb diet to ensure it is safe and effective for you.

Low-carb and mortality: Long-term studies link low-carb diets to a higher risk of overall mortality (death from all sources) compared to moderate-carb intake within the AMDR.

Moderate-carb benefits: Although the precise mechanism is poorly understood, the reduced risk of overall mortality with a moderate carb intake may be from fruits, vegetables, and whole grains.

Initial weight loss: If you do not eat enough carbs, you will experience some initial weight loss due to body water, not fat loss. Carbohydrates are stored with water, so as you use your stored glucose (glycogen), your body loses water, affecting weight.

Sustainability and professional support: Although a very low-carb diet can be safe, it is challenging to maintain long-term. Consider working with a nutritionist to minimize potential nutrient deficiencies.

THE FINAL WORDS OF CARBOHYDRATES INTAKE

Ketosis and Fat Burning (0 to 50 g per Day)

When you keep your carbohydrate intake near 50 g per day, you're going to enter a physiological state known as ketosis lipolysis. Most people get scared when they hear the word ketosis, confusing it for ketoacidosis, a state that type I diabetics and alcoholics with liver damage may go into.

Ketosis lipolysis is a normal state of physiology that involves primarily using fat for energy (this happens in fasting too). Fatty acids are broken down into ketones. These ketones are then used for fuel by the body and brain. Ketones also have an appetite-suppressing effect, and after a few weeks in ketosis, you will tend to lose your sweet cravings, too.

The Sweet Spot! (50 to 100 g per Day)

This is a spot I typically like to keep my carbohydrate range within; it allows me to not rely on exercise to stay lean and fit. If you have a damaged metabolism, a 0 to 50 g per day range may be where you need to live for a while. Some people also do well cycling in and out of ketosis: three or four days in a row in ketosis and one day in the sweet-spot range or higher.

Carbohydrates are primarily used for instant energy, so if you're doing lots of exercise or you're under higher amounts of stress, getting a little bit of extra carbohydrates from healthy sources may be beneficial.

Maintenance (100 to 150 g per Day)

Most people do well in maintaining their weight when their carbohydrates are within this range. Everyone is different, so depending on how damaged your metabolism is, this range may be too high for you. If you're relatively lean, exercise three to four times a week, and engage in activities like CrossFit, this will be a great place for you to be. I recommend timing a good chunk of your carbohydrate intake post workout to help improve recovery.

The Steady Track to Weight Gain (150 to 300 g per Day)

When your carbohydrate levels are this high on a continuous basis, especially when there is no energy output to back it up, you are starting to push your body into an insulin-resistant state. The hormone that is secreted when you eat carbohydrates is insulin, and it primarily works by pulling carbohydrates and amino acids into your muscles. As you should know, when

your muscles and liver are saturated with carbohydrates, the rest of those carbohydrates will be stored as fat. When your carbohydrate intake is within the 150 to 300 g per day range, it's highly likely it will be stored as fat.

Danger, Will Robinson! (300 g per Day of Carbohydrates or More)

If you're eating based on the Food Guide Pyramid, it's more than likely your carbohydrate intake will be in or around this range. All you have to do is eat your bagel every morning along with your orange juice or cereal, have a sandwich for lunch with your Gatorade, and eat a nice plate of pasta for dinner, and you'll be on your way. Most people that are eating carbohydrates at this high level tend to have insulin resistance as well as increased risk markers for inflammation and metabolic syndrome.

Once again to remind you! What Types of Carbohydrates Should I Eat?

Starchy versus Non-starchy

Starchy carbohydrates: White potatoes, sweet potatoes, winter squash, beats, yams, carrots (if cooked), butternut squash, rutabaga, spaghetti squash, turnips, pumpkin, plantains, and bananas. These carbohydrates can have higher levels of sugar along with higher levels of nutrients.

Non-starchy carbohydrates: Broccoli, spinach, kale, celery, brussels sprouts, cauliflower, zucchini, Swiss chard, spinach, asparagus, peppers, onions. These carbohydrates have the lowest level of sugar along with the highest level of nutrients.

High-Glycemic versus Low-Glycemic Carbohydrates

High glycemic: Grains, chips, candies, breads, refined sugars, cereals, junk foods, and tropical fruits (bananas, watermelons, pineapples, papaya, mangoes, and all fruit juices). Outside of the whole food fruit sources, higher glycemic carbohydrates tend to have the lowest amount of nutrients with the highest amount of sugar.

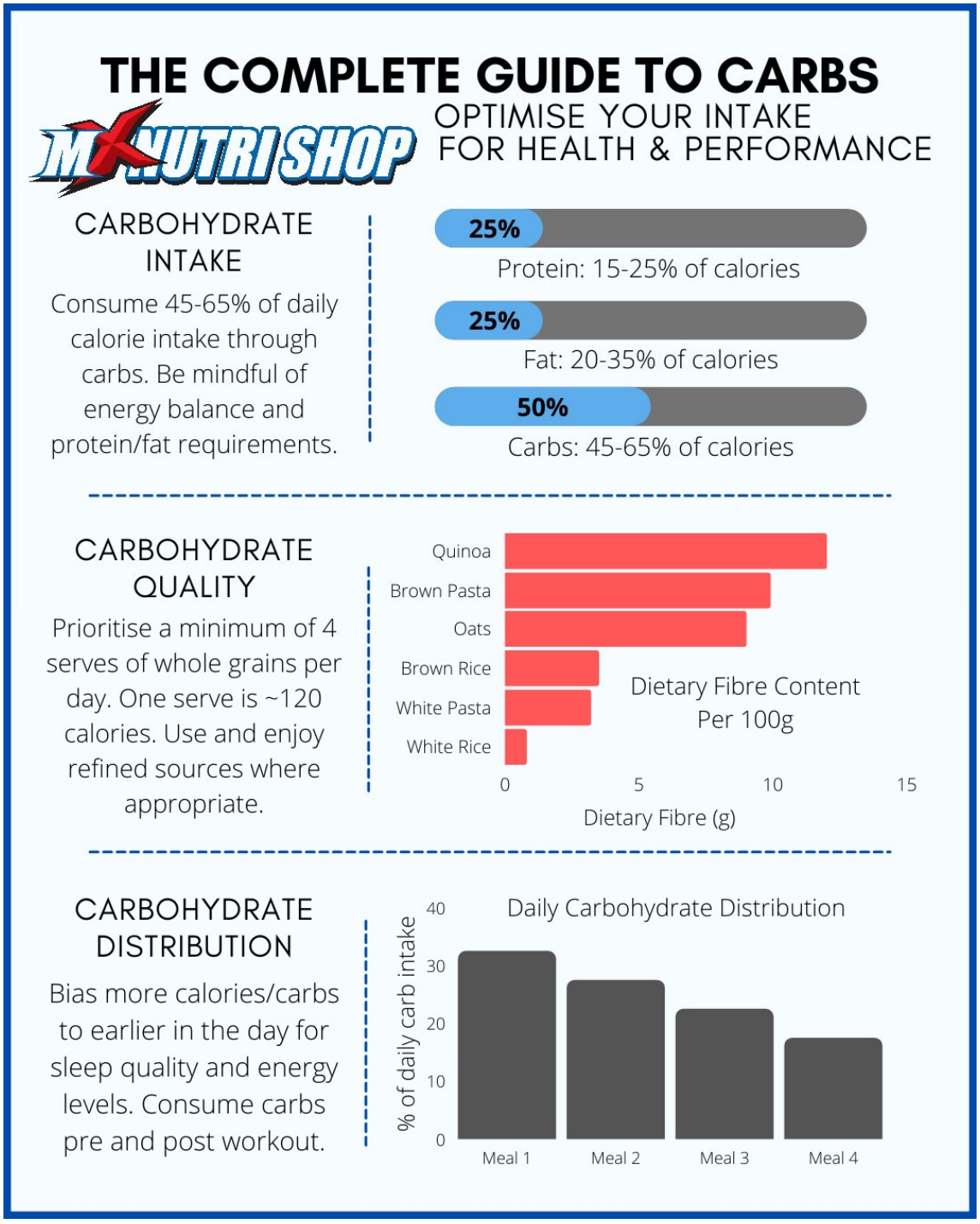
Low glycemic: Blackberries, blueberries, strawberries, huckleberries, apples, oranges. these carbohydrates, as a fruit, tend to have the lowest amount of sugar with a higher amount of nutrition.

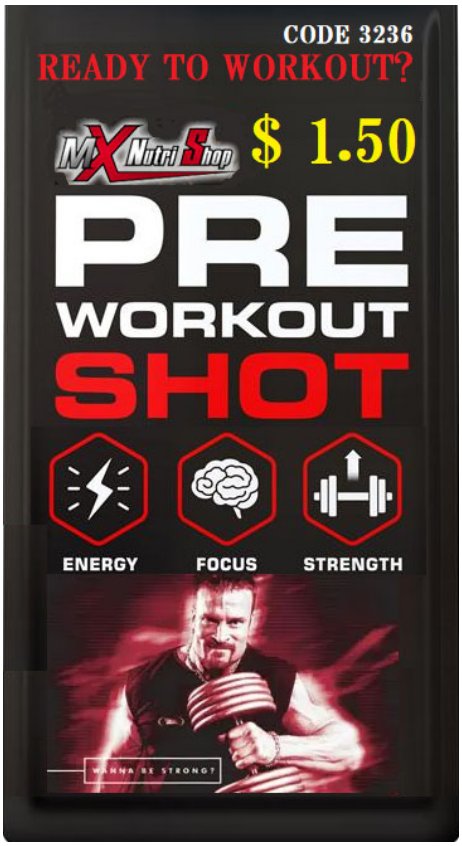
The carbohydrates that you eat on a daily basis should be of a non-starchy variety, which are all the vegetables your mom tried to get you to eat when you were little.

There are some benefits to the intake of some of the starchy carbohydrates, but you have to make sure they are dosed according to your metabolic constitution and activity level.

When we're looking at the glycemic index, this refers to how fast the sugar in the carbohydrates breaks down and absorbs into your bloodstream. Carbohydrates that have a higher glycemic index get absorbed and impact your blood sugar faster.

The faster the carbohydrates impact your blood sugar, the faster your insulin spikes. When you have pronounced insulin spikes, this drives down your blood sugar, creating sweet cravings just a few hours later. This is a vicious cycle that I see most people live in their entire life. Break the blood-sugar roller coaster by eating healthy proteins, fats, and the right carbohydrates for your metabolic type with each meal.





COMPLETE GUIDE TO PRE-WORKOUT: Ingredients, Timing & Dosage

Ever walked into the gym feeling a bit flat? Or maybe you've had a long day at the office and need that extra push to get through your workout.

Pre-workout might be just what you need. But with so many options out there, how do you know which one is right for you? This guide will break down everything you need to know about pre-workout supplements, and how you can incorporate them into your routine.

What Are Pre-Workout Supplements and Why Do People Use Them?

Pre-workout supplements are supplement formulas designed to be taken before exercise. They're often a blend of vitamins, minerals, amino acids, and other specialist ingredients that work together to help support your body during training. Unlike a standard snack or drink, a good pre-workout is specifically formulated to help improve concentration and alertness, and to increase endurance performance.

Think of them as a tool to help you get the most out of your training. If you're feeling a little tired or your motivation is low, a pre-workout can provide the mental and physical support you need to push through your session and hit your goals.

Choosing the Right Pre-Workout Supplement for You

This is where things can get a bit confusing. With so many options, how do you pick one that's right for your goals? The key is to look at the ingredients. Different blends are designed to support different aspects of your workout, whether that's endurance, concentration, or overall performance. Let's break down some of the most common ingredients you'll find when you inspect the label.

Basic Key Ingredients to Look For (and What They Do)

Caffeine: A classic for a reason. Caffeine helps to improve concentration and increase alertness. It also helps increase your endurance performance and capacity, which can be a game changer for longer, more demanding sessions. If you train in the morning or early afternoon, a pre-workout with caffeine can give you the push you need.

Creatine: A well-researched and widely used supplement. Creatine increases physical performance in successive bursts of short-term, high-intensity exercise. This makes it a great choice for activities like weightlifting or sprinting.

Beta-Alanine: This amino acid is known for causing that tingling sensation you might feel after taking a pre-workout. While it can feel strange, it's harmless. Beta-alanine helps to produce carnosine in the body, which can help support high-intensity exercise.

L-Citrulline Malate: A popular amino acid that helps increase nitric oxide production, which can improve blood flow. It's often included in formulas (sometimes with **Arginine**) to support muscle pumps and overall performance.

Vitamins & Minerals: Many pre-workouts include vitamin B (like B6 and B12) and vitamin C. These vitamins contribute to the reduction of tiredness and fatigue and support the normal function of the immune system.

Stimulant or Stimulant Free?

That is the question. Your choice really depends on when you train and your personal tolerance.

A stimulant-based pre-workout, normally containing caffeine, is perfect for morning or midday workouts. The caffeine will give you a significant boost in energy, concentration, and endurance, helping you tackle your session head-on. But if you're sensitive to caffeine or training in the evening, this can be a problem.

That's where stimulant-free (or non-stim) pre-workouts come in. These formulas contain all the other great performance-supporting ingredients — typically beta-alanine and citrulline malate — but without caffeine. This means you can still get the benefits for your physical performance without the risk of an interrupted sleep schedule.

For example, if you finish work late and hit the gym at 8pm, a non-stim pre-workout is the smart choice. It allows you to train hard and still get to sleep at a reasonable hour, ensuring you're well rested for the next day.

Getting Your Pre-Workout Timing Right

Taking your pre-workout at the right time is crucial to getting the most out of it. If you take it too early, the effects might wear off before your session even starts. Take it too late, and you might still be feeling the effects long after you've left the gym.

How Long Does Pre-Workout Take to Kick In?

Generally, you should aim to take your pre-workout 30-45 minutes before you plan to start training.

This time frame allows the key ingredients to be absorbed by your body and for the effects to kick in right as you start your warm-up. This way, you'll be feeling the full benefits exactly when you need them.

However, everyone's body is different. Factors like your metabolism, the food you've recently eaten, and your caffeine tolerance can all influence how quickly you feel the effects. For instance, if you take it on an empty stomach, you might feel the effects a bit sooner than if you've just had a large meal. It's mostly about working out what works best for your body and your routine.

Finding Your Ideal Pre-Workout Dosage

When you first start with pre-workout supplements, the instructions on the tub can be a bit confusing. A single "scoop" can contain wildly different amounts of ingredients depending on the product and brand.

How Much Pre-Workout Should You Take? (Especially for Beginners)

The golden rule is start with a lower dose. Don't just dive in and take a full scoop on your first try. Start with half a scoop to assess your tolerance and see how your body reacts.

Some pre-workouts are pretty strong, so a full serving might contain a large dose of caffeine and other active ingredients. By starting with half a scoop, you can avoid feeling jittery or overwhelmed. You can always increase the dosage gradually in your next sessions until you find the sweet spot that provides the benefits you're looking for without any unwanted side effects. Remember, less is often more when you're just starting out.

Setting Up a Simple Pre-Workout Routine That Works

Taking a pre-workout isn't just about a powder. To get the best results, you need to think about what else you're doing.

What Else to Include: Food, Hydration and Safety Tips

Food: Pre-workout on an empty or near-empty stomach will likely work faster, but that doesn't mean you should train without any fuel. If you have time, a light, easily digestible snack

containing a mix of carbs and protein 60-90 minutes before your workout can provide your muscles with energy while allowing the pre-workout to kick in on time. Think a banana with a tablespoon of peanut butter, or a handful of oats.

Hydration: Mix your pre-workout powder with a sufficient amount of water to ensure you are well hydrated. Proper hydration is key for performance, and mixing your supplement this way helps you tick two boxes at once.

Safety Tips:

Don't exceed the recommended dose. Taking more won't make it work better and could lead to unwanted side effects.

Be mindful of your total caffeine intake throughout the day. If you've had several coffees, it might be wise to opt for a stimulant-free pre-workout or a half-dose.

Avoid taking a stimulant pre-workout too late in the day, as it can interfere with your sleep. Aim to take it at least 6-8 hours before you plan to go to bed.

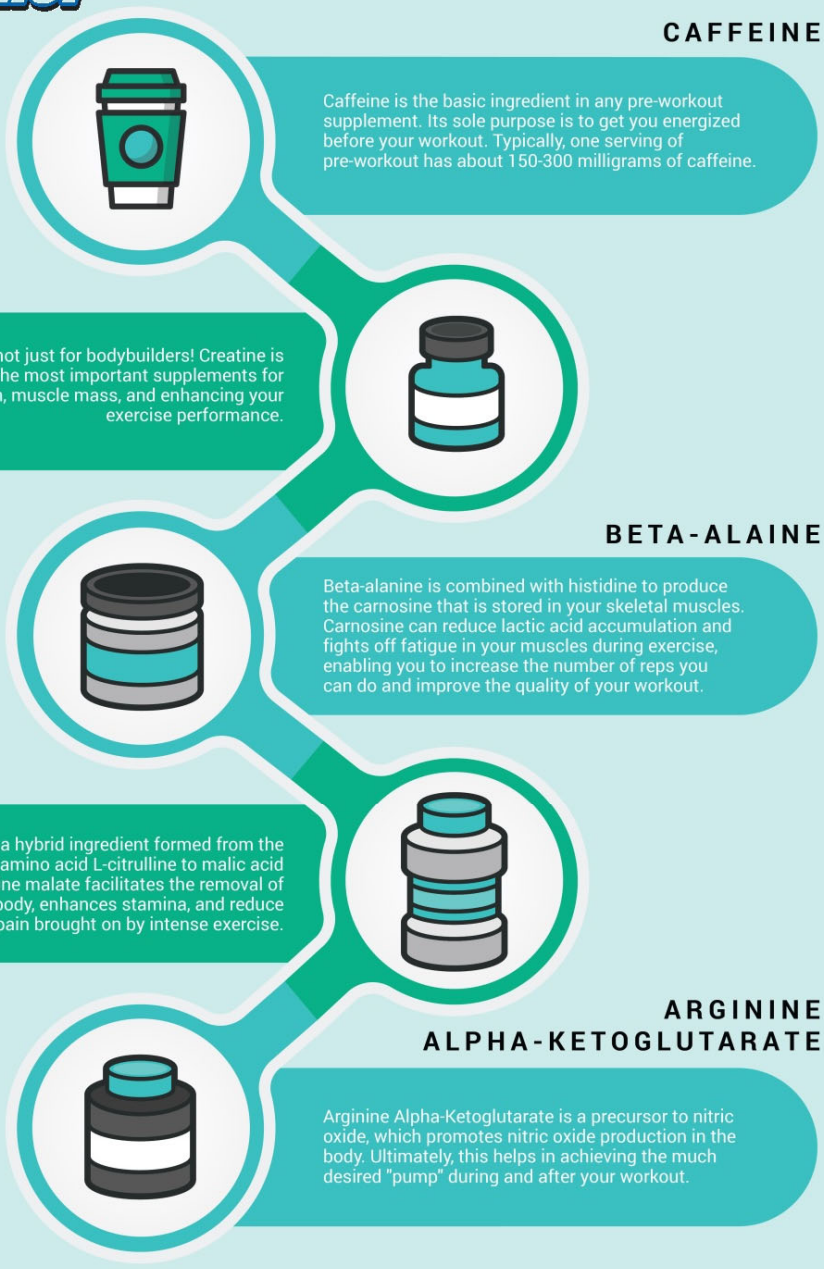
By building this simple routine, you can set yourself up for success and make your pre-workout supplement a powerful part of your training ritual.

Pre-workouts are great workout aids to really help our overall performance. Designed to enhance muscle pumps, increase energy, aid in weight loss, and provide an all-around great performance boost, these supplements can work wonders for you. Knowing what ingredients to look for, how safe they are and how to use them effectively is important but all within your grasp with this guide on pre-workout supplements.

Pre-Workout Supplement Guide

The 5 ingredients to look for in any pre-workout supplement

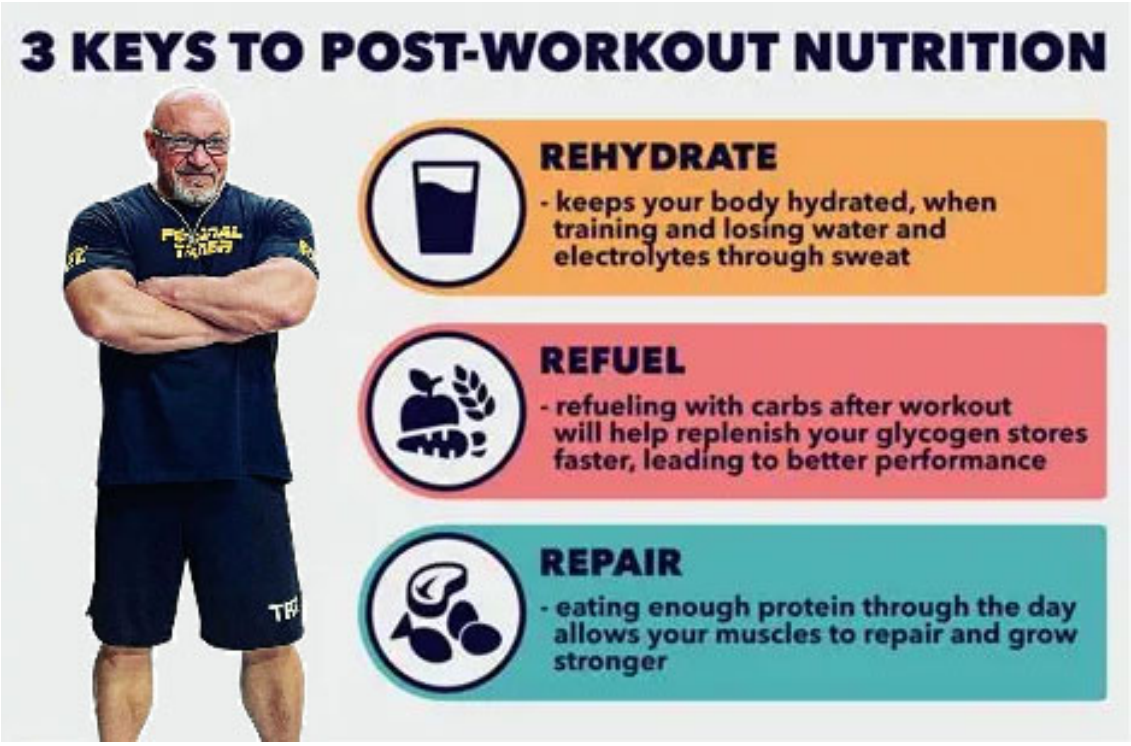
MX NUTRI SHOP



The Ultimate Guide to Post-Workout Nutrition: Strategies for Recovery and Results

After a workout, your body enters a recovery phase where it repairs muscle tissues, replenishes energy stores, and adapts to the stress imposed during exercise. Consuming the right nutrients during this period is crucial for maximizing the benefits of your training.

Whether you're training for strength, endurance, muscle gain, or general health, what you eat after your workout can make or break your progress. Post-workout nutrition plays a pivotal role in recovery, muscle repair, and long-term performance.



In this comprehensive guide, we'll break down exactly what post-workout nutrition should include, when to eat it, and how to tailor your approach to your specific goals. Let's dive in!

Why Post-Workout Nutrition Matters

Exercise creates stress on the body: depleting glycogen stores, causing micro-tears in muscle tissue, and increasing cortisol levels. **Post-workout nutrition helps your body:**

Replenish glycogen

Repair and build muscle tissue

Reduce muscle soreness

Supporting immune function

Restore fluid and electrolyte balance

Skipping or delaying nutrition after a workout can blunt recovery and reduce training adaptations over time. Consistent intake of the right nutrients after training sessions accelerates repair and helps athletes get more out of each workout.

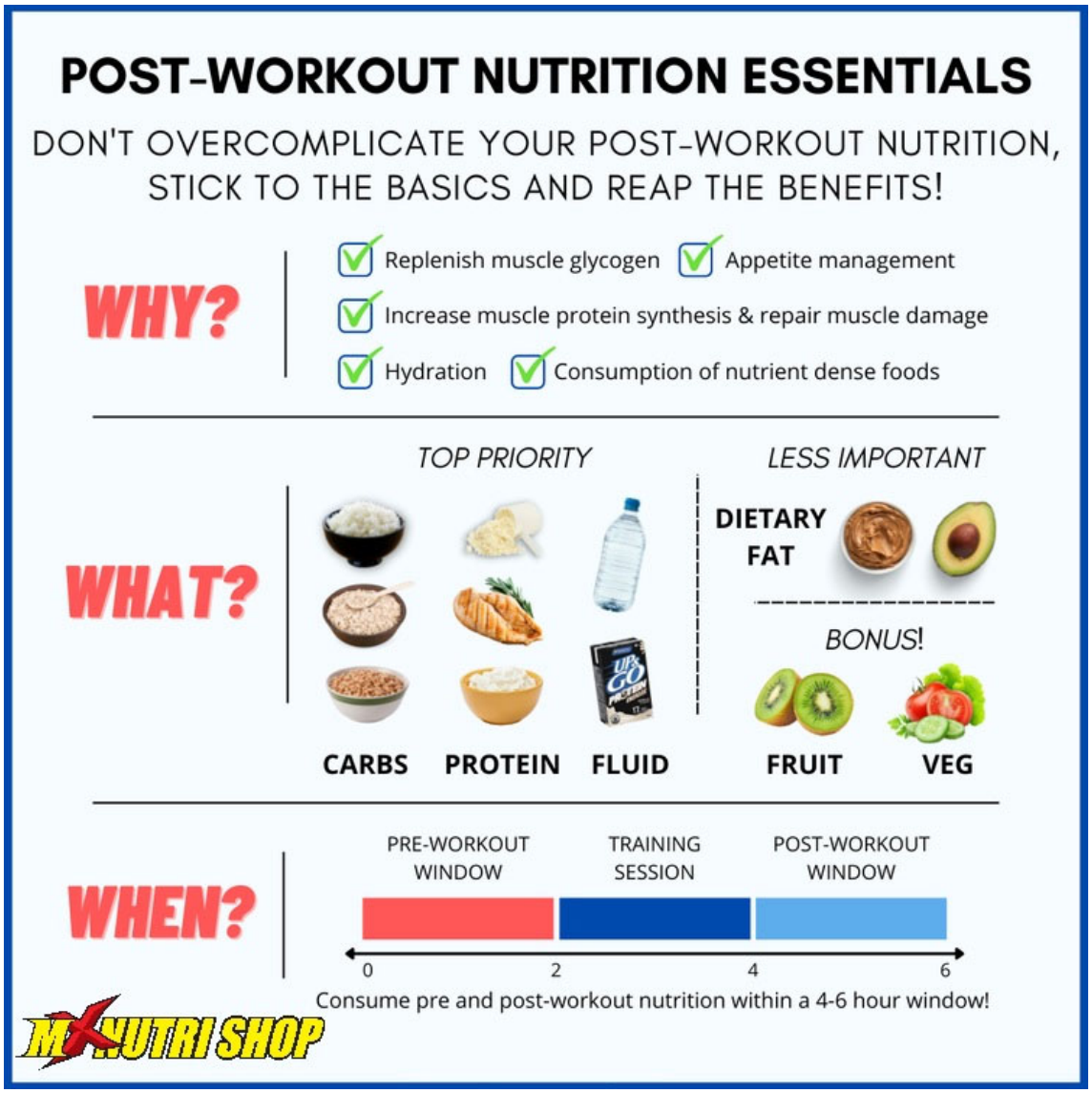
The Post-Workout Nutrition Window: Is Timing Everything?

You've probably heard of the "anabolic window," a short time frame after training where nutrient timing is supposedly critical. While some urgency exists, especially for athletes training multiple times per day, the window is broader than once believed.

For most active individuals, eating within 1-2 hours after training is sufficient.

Total daily nutrition still has the greatest impact, but if you're training hard and regularly, timing your post-workout nutrition can help optimize recovery.

Key takeaway: Don't panic if you miss a 30-minute window, but don't go for hours without eating either. Prioritize convenience and consistency.



Macronutrients After a Workout

Timing Tip: If you're not eating a full meal soon after training, try to consume a snack like a protein bar or **smoothie/ bowl or waffle** that contains both protein and carbs within 30–60 minutes post-exercise. Then follow it up with a balanced meal a couple hours later.

Protein: The Building Block of Recovery

Exercise increases muscle protein breakdown, so post-workout protein is essential to kickstart repair and growth.

Recommended amount: 20-40g of high-quality protein

Ideal sources: Whey protein, Greek yogurt, eggs, lean meats, tofu, tempeh, protein shakes

Leucine, a branched-chain amino acid, is particularly important in stimulating muscle protein synthesis. Post-workout meals should include protein sources rich in leucine for best results. Animal proteins and some plant-based blends (like pea + rice) provide adequate leucine.

Carbohydrates: Fuel Replenishment & Recovery

Carbohydrates restore glycogen, your muscles' main energy source during training. Post-exercise, your body is primed for glycogen storage, especially within the first 2 hours.

Recommended amount: 1.0-1.2g of carbs/kg body weight, depending on training intensity

Ideal sources: Fruit, rice, oats, whole grain bread, potatoes, sports drinks, cereal, smoothies

Combining carbs with protein enhances insulin response and nutrient uptake, helping accelerate both glycogen and protein synthesis.

Carbs are just as crucial as protein when it comes to post-workout nutrition. They help blunt the rise in cortisol and support better hormonal recovery.

Fats: Delay or Include?

While fat slows digestion, moderate fat intake post-workout doesn't appear to hinder recovery. Including healthy fats can support satiety and overall nutrient intake.

Best sources: Nut butters, avocado, seeds (Also served at MXNUTRISHOP as ADD-IN), olive oil, full-fat yogurt.

Key takeaway: Focus primarily on protein and carbs post-workout, but don't fear a little fat – especially if your next meal is a few hours away.

Best Post-Workout Meals and Snacks

Here are some balanced options combining protein, carbs, and optional fats:

Grilled chicken + quinoa + roasted veggies

Protein smoothie with banana, spinach, and almond butter

Greek yogurt + berries + granola

Turkey sandwich on whole grain bread

Tofu stir-fried with brown rice

Cottage cheese + pineapple + walnuts

Convenience is key when planning post-workout nutrition. Choose meals and snacks that are easy to prepare and digest. If whole food meals aren't practical, a Smoothie / Bowl / Waffle or Protein Bar can bridge the gap.

Hydration and Electrolyte Recovery

During intense or prolonged workouts, you lose fluids and electrolytes like sodium and potassium through sweat. Rehydration is a vital part of post-workout recovery.

(You can use a supplement named EAA with electrolytes including during your workout)

Drink 16–24 oz of fluid per pound lost during exercise

Replenish electrolytes if training in heat, or for longer than 60 minutes

Coconut water, sports drinks, or salty snacks can help

Hydration status affects everything from muscle recovery to mood, so don't overlook it! It's an often-underestimated part of effective post-workout nutrition.

Tailoring Post-Workout Nutrition to Your Goals

For Muscle Gain

Prioritize protein (at least 30-40g)

Include moderate-to-high carbs

Eat within 1-hour post-workout

Consider creatine and whey supplements

For Fat Loss

Focus on lean protein and moderate carbs

Control total calories, but don't skip the post-workout meal

Avoid training fasted if it compromises intensity

For Endurance Athletes

Higher carb focus (1.0-1.5g/kg)

Add sodium-rich foods or electrolyte drinks

Protein still matters (20-30g)

For General Health & Fitness

Eat a balanced meal within 2 hours

Mix whole foods with convenience items

Keep portions appropriate to your energy output

Tailoring post-workout nutrition to your unique goals allows you to optimize results without overcomplicating your routine.

Supplements to Support Post-Workout Nutrition

Some supplements can enhance convenience and recovery:

Whey protein: Fast-digesting and leucine-rich

Creatine monohydrate: Supports strength and hypertrophy

Omega-3 fatty acids: Reduce excess inflammation

EAA (Amino Acids), Glutamine and/or Electrolyte blends: For muscle recovery and hydration support.

Stick to evidence-based options to support (not replace!) your post-workout nutrition from whole foods.

Common Post-Workout Nutrition Mistakes

Waiting too long to eat

Skipping carbs in favor of just protein

Using only supplements and neglecting whole foods

Overeating due to hunger or "earned calories" mindset

Neglecting recovery and hydration

Being aware of these common pitfalls can help you stay consistent and get more out of your training.

FAQs About Post-Workout Nutrition

Q: Is it okay to take a smoothie post-workout instead of a full meal? Yes. Smoothies are a convenient option for recovery before you take a whole meal.

Q: What if I train late at night? Have a smaller, protein- and carb-rich snack before bed.

Q: Can I skip post-workout nutrition if I'm intermittent fasting? Not ideal. Fasting may hinder recovery and gains if nutrients aren't provided within a reasonable time post-training.

Q: Do I need protein right after cardio? Ideally, yes. Especially if it's prolonged or intense. Combine with carbs for best recovery.

Final Thoughts

Post-workout nutrition isn't just a detail to gloss over. It's a fundamental part of your training program. By fueling your body after exercise with the right combination of protein, carbohydrates, fluids, and micronutrients, you'll:

Recover faster

Build muscle more effectively

Feel more energized

Reduce injury risk

Enhance performance over time

Action step: *You can customize at MXNUTRISHOP a "Build a go-to post-workout" smoothie, bowl or waffle that you enjoy and can stick with consistently prior to a whole meal!*

IN RESUME OF THIS CHAPTER

1. Key Goals of Post-Workout Nutrition

Replenish glycogen: Restore carbohydrate stores used during exercise.

Repair muscle tissue: Provide amino acids for protein synthesis.

Rehydrate: Replace fluids and electrolytes lost through sweat.

Reduce inflammation: Support recovery and reduce muscle soreness.

2. Optimal Nutrient Timing

Best window: Within 30–60 minutes after training for maximum benefit.

Meal frequency: Follow up with a balanced meal 2–3 hours later.

3. Macronutrient Targets

Protein: 20–40 g high-quality protein (whey, casein, soy, pea) to stimulate muscle repair.

Carbohydrates: 1–1.2 g/kg body weight for glycogen replenishment (higher for endurance athletes).

Fat: Keep moderate; too much fat can slow digestion immediately post-workout.

4. Recommended Whole Food Options

Protein: Grilled chicken, eggs, Greek yogurt, tofu, fish.

Carbs: Rice, oats, sweet potatoes, bananas, berries.

Hydration: Water, coconut water, or electrolyte drinks.

5. Popular Post-Workout Supplements

Whey Protein – Fast-digesting, rich in leucine for muscle protein synthesis.

Creatine Monohydrate – Supports strength, power, and recovery.

BCAAs / EAAs – May help reduce muscle breakdown (especially if training fasted).

Electrolytes – Sodium, potassium, magnesium for hydration balance.

Glutamine – Potentially aids recovery and immune function.

Carb Powders – Dextrose or maltodextrin for quick glycogen replenishment.

6. Sample Post-Workout Smoothie

You can also customize your smoothie at MXNUTRISHOP as following:

1 scoop whey protein (24~25 g protein)

1 banana (27 g carbs)

1 tbsp honey (17 g carbs)

Almond milk or another choice as offered at the store!

Optional ADD-IN: 5 g CREATINE + 1 dose of AMINO BLAST and/or GLUTAMINE

💡 Tip: If your goal is muscle gain, prioritize both protein and carbs post-workout. If your goal is fat loss, keep carbs moderate but still include protein to preserve lean mass.

WHAT TO EAT
BEFORE & AFTER WORKOUT

What you eat pre and post workout have a huge impact on how you perform & the results you achieve from your workouts. Savvy athletes know that eating the right foods before a workout can give you the necessary fuel to make it through the last ten minutes on the treadmill or through that last set of squats.

So, what should you eat before you hit the gym? While everybody is different, you can follow the guidelines below to stay strong even during your toughest workout. We provide suggestions of foods that are good for fuel and help you optimize your biomarkers.

PRE WORKOUT

The primary goal of the PRE-workout meal is to accomplish the following:

- Reduce muscle glycogen depletion.
- Reduce muscle protein breakdown.
- Reduce post workout cortisol levels.

A pre-workout meal stabilizes blood sugar and wards off hunger. Eat a nutritionally balanced snack 60-90 minutes before workout.

POST WORKOUT

Specifically, the goal of the POST-workout meal is to accomplish the following:

- Reduce muscle protein breakdown caused by exercise.
- Increase muscle protein synthesis.
- Reduce muscle soreness & fatigue.

A post workout meal should focus on healthy mix of carbohydrates, protein and fats to refuel your body within 3 hours in order to recover muscles properly.

PRE WORKOUT NUTRITION

- Oats porridge
- Fruit smoothie
- Egg omelette with whole grain toast
- Hummus & pita

POST WORKOUT NUTRITION

- Protein shake & fruit
- Egg whites & fruit
- Cereal & milk
- Banana and nuts

BEET ROOT POWDER, SMOOTHIE ADD-IN $0.90 CODE 4191

SUPPORTS BLOOD FLOW / BOOST NITRIC OXIDE PROCUCTION

It helps to experience more energy, endurance, and stamina without having to use heart-straining energy boosters. Each serving is equivalent to 2.5 whole beets. Suggested adding in a smoothie or take the product mixing 1 level tablespoon into 8 oz. of water or another beverage prior to a workout.

Calories: 30, Sodium: 50mg, Total Carbohydrates: 7g, Protein: 1g, Calcium: 12mg, Potassium: 234mg

CREATINE POWDER, SMOOTHIE ADD-IN $0.90 CODE 159

MUSCLE MASS, BRAIN FUNCTION & FUEL, POWER & STRENGHT

Creatine enhances athletic performance. It contributes to rapid energy production enhancing power or speed bursts requiring short periods of anaerobic activity. The reason could be related to the association of using creatine and increased glycogen storage in muscle. Glycogen can quickly release glucose, one of the best sources of instant energy.

There is also some evidence that creatine supplementation along with adequate calorie and protein intake can hasten muscle recovery after strenuous exercise. Again, this may be related to creatine's promotion of glycogen in muscle, because glucose-derived energy is needed to help the healing process.

Creatine supplementation does not build muscle. However, creatine supplementation along with regular resistance training and a well-balanced diet may offset age-related sarcopenia. Sarcopenia is the loss of muscle mass and power that happens as we grow older, but also occurs when muscles are inadequately activated, such as after an injury.

People with kidney disease should consult with their doctor prior to taking it.

Creatine is not an anabolic steroid, nor does it increase testosterone levels.

Each serving is equivalent to 5g. Suggested adding in a smoothie or taking the product by mixing 1 tablespoon into 8 oz. of water or another beverage prior and/or after workout.

Creatine Monohydrate: 5g

KRE-ALKALYN, SMOOTHIE ADD-IN $1.90 CODE 4383

INCREASED ENDURANCE & STRENGTH, IMPROVED ATHLETIC PERFORMANCE

Kre-Alaklyn is a patented pH correct form of creatine phosphate. Creatine increases the body's immediate energy supply, by facilitating the production of adenosine triphosphate (ATP) which increases peak power output and strength.

Head-to-head studies suggest that Kre-Alkalyn can improve strength and power output more than traditional creatine monohydrate. High-intensity training programs require the body to go under strenuous aerobic and anaerobic conditions. By supplementing the body with creatine, you will induce a greater improvement in exercise endurance and athletic

performance, resulting in improved times, more peak power, and stronger lifts.

Benefits of Kre-Alkalyn

Increased Endurance: Unlike traditional Creatine Monohydrate, studies suggest that Kre-Alklayn helps improve VO2 Max. This is the maximum volume of oxygen the body can consume during intense, whole-body exercise. Because oxygen consumption is linearly related to energy expenditure, when we measure oxygen consumption, we are indirectly measuring an individual's maximum capacity to do work aerobically. Therefore, with an improvement in VO2 Max, comes a significant improvement in endurance and exercise performance.

Increased Strength: The human body uses stores of creatine phosphate during very intense bouts of activity, such as lifting, jumping, and sprinting. With the addition of creatine to support ATP regeneration, together they can support a maximum physical effort before we depend on the breakdown of carbohydrates, specifically glucose to provide energy through glycolysis. Supplementing with **Kre-Alkalyn** is reported to increase the content of creatine phosphate in muscle by approximately 20%. Having more creatine phosphate in muscle cells means more ATP can be rapidly produced during exercise, which can lead to gains in strength, power, speed and muscle growth.

Improved Athletic Performance: **Kre-Alkalyn** helps enhance athletic performance through its ability to support short bouts of intense training, by producing higher muscle force and power. The greatest improvements in exercise performance are found during a series of repetitive high-power reps.

Supports Stronger Bones: In building stronger bones, calcium has an indispensable assistant: Vitamin D3. Vitamin D3 helps the body absorb calcium to fortify overall bone health and maintain a healthy immune system.

Each serving is equivalent to 2.5 whole beets. Suggested adding in a smoothie or take the product mixing 1 level tablespoon into 8 oz. of water or another beverage prior to a workout.

Calories: 30, Sodium: 50mg, Total Carbohydrates: 7g, Protein: 1g, Calcium: 12mg,
Potassium: 234mg

Twenty-four elite athletes from the Bulgarian National Weightlifting Team were selected to participate in a double-blind clinical study comparing Kre Alkalyn to standard creatine monohydrate.

After 60 days, the Kre-Alkalyn® group (using 7.5 g per day) experienced an overall average strength increase of 28.25% above those in the unbuffered creatine monohydrate group.

Kre-Alkalyn Vs Creatine Monohydrate

Kre-Alkalyn is a pH corrected form of creatine, also known as 'buffered' creatine. **Kre-Alkalyn** was created to address the negative side effects associated with ordinary creatine monohydrates, such as cramping, bloating, and water retention specifically by resolving the conversion of creatine to the toxic by-product creatinine. Studies show through real- and accelerated-time testing, that **Kre-Alkalyn** maintains pH stability with no degradation up to 5 years, were as creatine monohydrate has a pH between 2-3 as soon as it is dissolved in water, resulting in a highly acidic environment. Unlike creatine monohydrate, **Kre-Alkalyn** is not degraded to creatinine which subsequently leads to greater bioavailability 1.5 grams of Kre-Alkalyn is equivalent to about 10–15 grams of ordinary Creatine Monohydrate.

Kre-Alkalyn **solves for negative side effects often associated with creatine monohydrate such as bloating, water retention and cramping.**

Kre-Alkalyn **does not require a loading phase or de-loading phase, leading to greater cost-effectiveness and better performance outcomes.**

Each serving is equivalent to 3g. Suggested adding in a smoothie or taking the product by mixing 1 tablespoon into 8 oz. of water or another beverage prior workout.

BETA-ALANINE, SMOOTHIE ADD-IN $0.90 CODE 2682

TRAIN HARDER, LIFT HEAVIER, and GO LONGER with BETA-ALANINE!

Beta-alanine is a non-essential amino acid that is known for its role in enhancing muscle performance. It helps to increase muscle carnosine levels, which can improve exercise performance by reducing fatigue during high-intensity activities. Common benefits of **Beta-alanine** supplementation include:

Improved endurance: It can enhance performance in endurance sports and high-intensity training.

Increased muscle strength: It may help in building muscle strength and power.

Reduced fatigue: It helps to buffer acid in muscles, delaying fatigue during intense exercise.

When considering supplementation, it's important to follow recommended dosages and be aware of potential side effects, such as tingling sensations.

One serving (1 teaspoon 3.2g)

- Beta-Alanine 3,200 mg

ARGININE, SMOOTHIE ADD-IN $0.75 CODE 4591

ENHANCE PERFORMANCE & INCREASE LEAN MUSCLE MASS!

Arginine is an amino acid that plays a crucial role in the body by helping to build proteins and producing nitric oxide, which is essential for blood flow regulation and various bodily functions.

Arginine is a conditionally essential basic amino acid involved primarily in urea metabolism and excretion, as well as in DNA synthesis and protein production. It is an important precursor of nitric oxide (NO) and thus plays a role in the dilation of blood vessels.

Food sources such as peanuts and almonds are natural sources of **Arginine**, but for those looking to enhance athletic performance or increase lean muscle mass, it is difficult to derive the amount required by the body in optimal results from food sources.

- Precursor for synthesis of Nitric Oxide (NO)
- Stimulation of the release of growth hormone
- Improves immune function
- Increases muscle mass

Arginine May be helpful for fat loss. It has also been shown to increase the body's ability to consume and utilize oxygen, primarily due to its ability to increase levels of Nitric Oxide (increase Vasodilatation).

One serving (2 teaspoon 6g)

- L-Arginine 6,000 mg

CITRULLINE MALATE, SMOOTHIE ADD-IN $0.75 CODE 2415

DELAY MUSCLE FATIGUE, PRODUCTION OF NITRIC OXIDE,

IMPROVES BLOW FLOW & OXYGEN DELIVERY TO MUSCLES

Citrulline malate (CM) is an amino acid compound that has gained attention due to its reported ability to delay the onset of fatigue during intense exercise. That's why you'll often find **CM** in pre-workout supplements.

Citrulline, sometimes referred to as **L-citrulline,** is a non-essential amino acid. Once formed, citrulline is involved in various metabolic pathways — most notably, the urea cycle — and is a precursor for the amino acid **Arginine. (Arginine has a role in the production of nitric oxide, which widens blood vessels to improve blood flow and oxygen delivery around the body.)**

During aerobic exercise, skeletal muscle requires oxygen for energy production, therefore producing more nitric oxide gets more to working muscles, and leads to higher aerobic capacity, meaning you can push yourself to higher intensities.

Food sources such as Watermelon, Cucumbers, Pumpkin, Squash, Nuts, Chickpeas, Onions, Liver, Salmon and Beef are natural sources of **Citrulline**, but for those looking to enhance athletic performance or increase lean muscle mass, it is difficult to derive the amount required by the body in optimal results from food sources as a stepping stone to boosting your body's nitric oxide production and deliver oxygen to the muscles.

- Citrulline Malate Benefits

Citrulline Malate is an essential intermediate of the tricarboxylic acid cycle (TCA), which generates two-thirds of the body's energy by utilizing fats and carbohydrates consumed through the diet. In the TCA cycle, malate is stripped of its hydrogen atoms, which in the process generates NADH2. This co-enzyme can then go on to produce adenosine triphosphate (ATP), which is the energy needed for muscle contraction.

Fundamentally, making sure your body has enough **Citrulline Malate** will keep the TCA cycle working smoothly and ensure your muscles have enough usable energy to keep you moving.

Summary: Citrulline Malate is essential to produce energy for muscle contraction

- Citrulline malate can delay muscle fatigue

During one cross-over study, resistance-trained men completed five sets of leg press, hack squat, and leg extension at 60% of one-rep max (the maximum weight you can lift for one repetition) until failure. Following the consumption of **Citrulline Malate**, the number of reps performed was significantly higher across all exercises compared to the placebo group.

Being able to perform more reps equates to more time under tension (TUT), which leads to superior muscle building.

Similar effects have been observed in women, with citrulline malate supplementation leading to number of reps completed of various upper and lower-body resistance exercises, compared to the placebo. On top of this, the women in the study reported lower ratings of perceived exertion after consuming **Citrulline Malate**.

Imagine exercising for longer and feeling less tired!

If dumbbells aren't your thing, **Citrulline Malate** can also improve calisthenic exercise performance, such as chin-ups and pull-ups, as well as boost explosive power during a cycling Wingate performance test.

Summary: Citrulline can help delay muscle fatigue, making you able to keep going during your workout

- Improves oxygen delivery to muscles

Not only does **Citrulline Malate** have benefits for power-related exercise, it has also shown

benefits in aerobic exercise.

A research group tested this using a high-intensity cycling protocol after participants had consumed either **Citrulline Malate** or placebo for the previous seven days. In the case of this study, **Citrulline Malate** increased the distance covered in a given time, improved capacity for oxidative metabolism, and lowered arterial blood pressure.

So, if your goal is to improve endurance performance, a **Citrulline Malate** supplement might be worth a try.

Summary: Better delivery of oxygen to the muscles from Citrulline Malate can help boost your aerobic endurance.

- Citrulline Malate Dosage & Side Effects

Studies demonstrate that a daily dose of 6-8g of **Citrulline Malate** is sufficient to induce an ergogenic effect, though doses as low as 3g still offer performance benefits. Whether taken acutely as a single dose, or over several consecutive days, citrulline malate is considered safe to consume and doesn't cause adverse effects.

Summary: 3g twice a day is an appropriate dose of Citrulline Malate to add to your training plan.

One serving (1 spoon 3g)

- L-Citrulline 3,000 mg

TAURINE, SMOOTHIE ADD-IN $0.90 CODE 4245
ELEVATE YOUR EVERYDAY HEALTH! ANTIOXIDANT SUPPORT
SUPPORTS NERVOUS SYSTEM & CELLULAR HEALTH

Taurine is an amino acid that has a few important roles in your body, including supporting immune health and nervous system function. Most of the time, your body produces enough taurine on its own, but adding in your smoothies or taking supplements can also help you meet your taurine needs.

Taurine is a naturally occurring sulfur-containing amino acid that is found abundantly in the brain, heart, eyes, and muscles. It plays important roles in various bodily functions, including supporting nerve growth and maintaining cardiovascular health. **Taurine** is not used to build proteins but is crucial for many physiological processes. It can be obtained from dietary sources such as meat, fish, and eggs, and is often added to energy drinks and nutritional supplements.

- The main roles of Taurine in your body are:

Maintaining proper hydration and electrolyte balance in your cells

Forming bile salts, which play an important role in digestion

Regulating minerals such as calcium within your cells

Supporting the general function of your central nervous system and eyes

Regulating immune system health and antioxidant function

Taurine deficiency has been shown to cause eye damage, chronic liver disease, muscle weakening, and an increased risk of developing diabetes

May fight diabetes

Taurine's antioxidant and anti-inflammatory properties may enhance insulin sensitivity, thereby reducing the risk of type 2 diabetes or improving blood sugar management in those with the condition.

Indeed, one study found that people with diabetes have a 25% lower concentration of **Taurine** than those without diabetes. This suggests that **Taurine** may have a role in diabetes management.

Although current research on the effects of taurine supplements for diabetes management in humans is limited, a 2018 review suggests that the supplements could be a good therapeutic option for improving blood sugar management in people with diabetes.

The same review also suggests that **Taurine** could have protective effects against diabetes-related complications such as nerve damage, kidney damage, and heart disease

May improve heart health

Taurine supplements have been shown to regulate blood pressure and improve heart function and blood fat levels in people with heart conditions such as heart failure. At high levels, it may even protect against heart disease.

Research suggests a link between higher **Taurine** levels and reduced cholesterol, lower blood pressure levels, and significantly lower rates of death from heart disease.

In one study, people with heart failure took 500 mg of taurine three times daily for 2 weeks. They experienced significant reductions in levels of total cholesterol, triglycerides, and C-reactive protein (CRP) — an inflammatory biomarker — both before and after exercise, compared with those who took a placebo.

In a 12-week study in people with high-normal blood pressure, taking 1.6 grams of taurine per day reduced systolic blood pressure (the top number) by 7.2 mmHg and diastolic blood pressure (the bottom number) by 4.7 mmHg compared with placebo.

Taurine may help reduce high blood pressure by decreasing the resistance of blood flow in your blood vessel walls and by improving the efficiency of skeletal and heart muscle contractions.

May boost exercise performance

Because of its ability to enhance muscle contraction and delay muscle fatigue, **Taurine** may benefit athletic performance.

What's more, **Taurine** may increase fat burning during exercise to better fuel your

performance.

A review of 19 studies assessing the effects of Taurine on athletic performance noted several benefits, including:

Increased oxygen uptake by the body

Increased time to fatigue

Reduced muscle damage

Improved recovery times

Improved strength and power

The review authors suggest that an effective dose to achieve these benefits is 1–3 grams taken 1–3 hours before your workout for at least 6–21 days

Other health benefits

Other potential benefits of taking taurine supplements include:

May benefit eye health. Taurine's antioxidant effects may help combat the oxidative stress associated with retinal degenerative diseases such as age-related macular degeneration.

May benefit hearing. Taurine may prevent the hair cells within the ear from becoming damaged, which is a key contributor to hearing loss.

May offer neuroprotective effects. The anti-inflammatory effects of taurine may reduce inflammation within the brain and combat neurodegenerative conditions such as Alzheimer's disease.

May support liver health. Taurine may have protective effects against chronic and acute liver injury.

How to supplement

The most common dosage range for taurine is 500–3,000 mg per day.

However, keep in mind that an EFSA report from 2012 suggests that up to 6,000 daily is safe, demonstrating its strong safety profile.

While some studies may use a higher dose for short periods, sticking to 3,000 mg per day will help you maximize the benefits while staying within a safe range.

The easiest and most cost-effective way to reach this dosage is through powder or capsule supplements. Most capsule supplements contain 500–1,000 mg per serving, while powdered taurine can have 1,000–2,000 mg per serving.

You can request at MXNUTRISHOP your TAURINE ADD-IN for your favorite smoothie or buy the supplement in the store!

One serving (1 spoon 3g)

- Taurine (Free-Form) 3,000 mg

JOINT SUPPORT, SMOOTHIE ADD-IN $1.50 CODE 2228

SUPPORTS HEALTHY JOINTS!

With Hydrolyzed Collagen, Glucosamine Sulfate and MSM

Collagen Joint Support Powder is a combination of ingredients that help to support the formation and function of healthy joint tissue. This product uses hydrolyzed collagen that has been enzymatically treated for ease of absorption, as well as MSM (methylsulfonylmethane), a biologically active form of sulfur, that serves as building blocks for collagen synthesis. Glucosamine is included as an essential structural component that is naturally present in bones and joints. Numerous clinical studies have demonstrated that glucosamine can help to support healthy joint structures and promote joint comfort.

You can request at MXNUTRISHOP your JOINT SUPPORT ADD-IN for your favorite smoothie or buy the supplement in the store!

Supplement facts

Serving Size: 1 Heaping Tablespoon (approx. 10.5 g)

Servings Per Container: about 30

	Amount Per Serving	**% Daily Value**
Calories	35	
Total Carbohydrate	< 1 g	< 1%**
Protein	7 g	
Hydrolyzed Collagen (Bovine)(BSE-free)	8 g	†
Glucosamine Sulfate (from 1,500 mg of Glucosamine Potassium Sulfate Complex)	1.1 g (1,100 mg)	†
MSM (Methylsulfonylmethane)	400 mg	†

** Percent Daily Values are based on a 2,000 calorie diet.
† Daily Value not established.

COLLAGEN, SMOOTHIE ADD-IN $1.25 CODE 1049

10 g of Collagen for Joint & Bone Health, 10,000 mcg of Biotin for Skin, Hair & Nail Strength, 90 mg of Vitamin C as a Source of Antioxidants

Collagen Protein is derived from Hydrolyzed Collagen Protein Peptides (Types I, II & III). Collagen is essential for production of connective tissue and provides support for healthy joints, hair, nails and skin. This Collagen product also has the added benefit of Biotin for extra support in the formation of healthy hair, nails, and skin and Vitamin C as a source of antioxidants.

You can request at MXNUTRISHOP your COLLAGEN ADD-IN for your favorite smoothie

or buy the supplement in the store!

Supplement facts		
Serving Size: 1 Scoop (10 g¤)		
Serving Per Container: ~44		
	Amount Per Serving	**%DV^**
Calories	35	
Protein	9 g	
Vitamin C (as Ascorbic Acid)	90 mg	100%
Biotin	10,000 mcg	33,333%
Hydrolyzed Collagen Peptides (Bovine skin / hide split)	10 g	†
^Percent Daily Value (DV) are based on a 2,000 calorie diet		

PROBIOTICS, SMOOTHIE ADD-IN $0.90 CODE 4879
HEALTHY INTESTINAL FLORA
HEALTHY IMMUNE SYSTEM FUNCTION

This product used for our smoothies offers a balanced spectrum of live organisms consisting of acid-resistant probiotic bacterial strains that are known to naturally colonize the human GI tract. Probiotic bacteria are critical for healthy digestion. They help maintain the integrity of the intestinal lining, support proper intestinal motility and participate in the detoxification process. Our selected supplement utilizes bacterial strains that have been clinically validated for their support of healthy immune system function.

You can request at MXNUTRISHOP your PROBIOTICS ADD-IN for your favorite smoothie or check the supplement in the store!

Supplement facts		
	Amount Per Serving:	**% Daily Value**
Blend of 10 Strains of Probiotic Bacteria (25 Billion CFU) Lactobacillus acidophilus (La-14), Bifidobacterium lactis (Bi-04), Lactobacillus plantarum (Lp-115), Lactobacillus casei (Lc-11), Lactobacillus rhamnosus (Lr-32), Lactobacillus paracasei (Lpc-37), Bifidobacterium breve (Bb-03), Streptococcus thermophilus (St-21), Lactobacillus salivarius (Ls-33), Bifidobacterium Longum (Bi-05	160 mg	**
**Daily Value not established.		

IMMUNE BOOSTER, SMOOTHIE ADD-IN $1.25 CODE 1111

COMPLETE IMMUNE SUPPORT, HYDRATION, ALKALIZING GREENS

Immune Defense with Vitamin C, Elderberry & Zinc

You get a comprehensive dosage (1 scoop 8g) designed to support immune health. It contains 1,000 mg of Vitamin C, 20 mg of Zinc, and a blend of superfoods such as elderberry, echinacea, and mushrooms (reishi, shiitake, lion's mane, and cordyceps). These ingredients work together to enhance white blood cell production and fight oxidative stress, which is crucial for a robust immune system. The drink also includes probiotics and prebiotics to support digestive health and a hydration boost with ingredients like coconut water, watermelon, and beet root. It is easy to mix in your smoothies and can be consumed daily to maintain a balanced diet and boost the body's natural defenses.

Supplement facts

Serving Size: 1 Scoop (8 g)

	Amount Per Serving	%Daily Value*
Calories	15	
Total Carbohydrate	3 g	1%
Dietary Fiber	2 g	7%
Total Sugars	1 g	*
Includes 1 g Added Sugars		2%†
Vitamin C (as ascorbic acid, acerola fruit (Malpighia glabra), rose hips (Rosa canina), Camu camu fruit)	1,000 mg	1,111%
Zinc (as zinc citrate)	20 mg	182%
Magnesium (as magnesium citrate)	21 mg	5%
Potassium (as potassium citrate)	235 mg	5%
Immunity Superfoods: **Prebiotics and Probiotic Blend** [Chicory root Inulin, apple fiber, beet fiber) and Lactobacillus sporogenes 100 Million CFU] **Herbal support** [Ginger root (Zingiber officinale), turmeric root (Curcuma longa), Holy Basil (Ocimum tenuiflorum), Echinacea purpurea] **Hydration Boosters** (Beet, Coconut Water, Watermelon) **Multi-Mushrooms** (Reishi, Shiitaki, Lions mane and Cordyceps) **Immune Berries** (Elderberry, Cranberry, Aronia berry, Blueberry, Maqui berry, Acaiberry, Amla (Indian gooseberry) **Alkalizing Greens** (Kale, Parsley, Broccoli sprout, Brussel sprout, Spinach, Celery)	2,600 mg	†

*Percent Daily Values are based on a 2,000 calorie diet.
†Daily Value not established.

GREEN SUPERFOOD, SMOOTHIE ADD-IN $1.90 CODE 4647

ALKALIZE - DETOXIFY - ENERGIZE

Whole Food Dietary Supplement with PROBIOTICS

Why Juiced Greens? Juicing concentrates the nutrients.

This product uses 6x more organic grasses to create our juice powder versus whole leaf powders, concentrating all the goodness.

GREEN SUPERFOOD® is packed with 40 nutrient-dense ingredients, including freshly harvested greens that are low-temperature dried to lock in nutrition, along with sprouts, fruit & veggies, plus live probiotics and enzymes for digestion.

Supplement facts

Serving Size: 1 Level Scoop (About 6.9 g)

	Amount Per Serving	% Daily Value
Calories	25	
Sodium	50 mg	2%
Total Carbohydrate	4 g	1%[1]
Dietary Fiber	1 g	4%[1]
Total Sugars (naturally occurring)	1 g	+
Protein	2 g	
Vitamin A (as Beta Carotene)	330 mcg	37%
Vitamin K	88 mcg	73%
Riboflavin	0.16 mg	12%
Folate	24 mcg DFE	6%
Calcium	38 mg	3%
Iron	1 mg	6%
Magnesium	19 mg	5%
Manganese	0.2 mg	9%
Potassium	154 mg	3%

Organic U.S.A. Farmed Green Juice Blend Organic Barley Grass Juice, Organic Alfalfa Grass Juice, Organic Oat Grass Juice, Organic Wheat Grass Juice, Organic Kamut® Grass Juice	3.5 g	+
Organic Fruit & Veggie Juice Antioxidant Blend Organic Apple (fruit), Organic Beet (root), Organic Broccoli (stalk & flower), Organic Carrot (root), Organic Spinach (leaf), Organic Tomato (fruit), Organic Pineapple (fruit), Organic Strawberry (fruit), Organic Tart Cherry (fruit), Organic Blackberry (fruit), Organic Green Bell Pepper (fruit), Organic Brussels Sprout (leaf), Organic Ginger (root), Organic Garlic (bulb), Organic Blueberry (fruit), Organic Green Onion (bulb), Organic Raspberry (fruit), Organic Parsley (leaf), Organic Cauliflower (flower & stem), Organic Red Cabbage (leaf), Organic Kale (leaf), Organic Cucumber (gourd), Organic Celery (stalk), Organic Asparagus (flower & stem)	2.4 g	+
Organic Sprout Blend Organic Flax Meal and Sprout, Organic Amaranth Sprout, Organic Quinoa Sprout, Organic Millet Sprout, Organic Buckwheat Sprout, Organic Garbanzo Bean Sprout, Organic Lentil Sprout, Organic Adzuki Bean Sprout, Organic Sunflower Seed Sprout, Organic Pumpkin Seed Sprout, Organic Chia Seed Sprout, Organic Sesame Seed Sprout	1 g	+
Raw Probiotic & Enzyme Blend Lipase, beta-Glucanase, Protease, Aspergillopepsin, Papain, Cellulase, Phytase, Lactase, Peptidase, Pectinase, Hemicellulase, Xylanase, Bacillus subtilis DE111® (250 million CFU at time of expiration)	30 mg	+

[1]Percent Daily Values are based on a 2,000 calorie diet.

SUPER GREENS, SMOOTHIE ADD-IN $1.25 CODE 4598

All-Natural Blend of "Superfoods"

Includes Chlorella and Spirulina

SUPER GREENS contains an all-natural blend of "superfoods" that provide broad-spectrum nutritional support. It is a complete whole-food supplement that contains adaptogenic, immune-supporting and antioxidant herbs, plant fibers, enzymes, and other important plant-derived compounds.

You can request at MXNUTRISHOP your SUPER GREENS ADD-IN for your favorite smoothie or check Greens Supplements in the store!

Supplement facts		
Serving Size: 2 tsp (5 g)		
	Amount Per Serving	**%Daily Value**
Calories	20	
Total Carbohydrate	2 g	1%*
Dietary Fiber	<1 g	2%*
Protein	<1 g	<1%*
Vitamin A (as beta-carotene)	270 mcg	30%
Sodium	15 mg	1%
Great Grains Complex Brown Rice Bran, Organic Flax Seed, Barley Malt	1.25 g	†
Sea Vegetable Complex Spirulina (Arthrospira platensis), Chlorella, Kelp (Ascophyllum nodosum)	895 mg	†
Fruit Complex Apple Pectin, Pineapple (fruit), Grape Skin Extract, Acerola Juice Powder (berry)	785 mg	†
Green Grass Complex Organic Barley Grass, Organic Kamut Grass, Organic Oat Grass, Organic Rye Grass, Organic Wheat Grass	700 mg	†
Vegetable Complex Beet Juice Powder (root), Broccoli (florets), Spinach (leaf)	255 mg	†
Fructooligosaccharides (FOS)	98 mg	†
*Percent Daily Values are based on a 2,000 calorie diet. †Daily Value not established.		

ORGANIC RAW FIBER, SMOOTHIE ADD-IN $1.25 CODE 163

Promotes Hunger Control, Support for Occasional Constipation

5 g Prebiotic Fiber per Serving from 5 Nutritious Organic Superfoods

Clear, odorless, unflavored and packed with goodness, ORGANIC RAW FIBER is an easy and convenient way to boost your favorite smoothie of food's nutritional value with a single dosage. Prebiotic Fiber from real, Organic, Non-GMO whole foods help curb appetite, promote growth of healthy probiotics in the digestive tract, support healthy digestion, elimination and occasional constipation.

Supplement facts		
Serving Size: 1 Tablespoon (About 6 g)		
	Amount Per Serving	**% Daily Value**
Calories	20	
Total Fat	0 g	0%[1]
Total Carbohydrate	5 g	2%[1]
Dietary Fiber	5 g	18%[1]
Soluble Fiber	4 g	
Insoluble Fiber	1 g	
Total Sugars	0 g	+
Organic Prebiotic Fiber Blend Organic Acacia Fiber (A. senegal), Organic Orange (peel), Organic Baobab (fruit), Organic Apple (peel), Organic Cranberry (seed)	6 g	+
[1]Percent Daily Values are based on a 2,000 calorie diet. +Daily Value not established.		

AMINO BLAST, SMOOTHIE ADD-IN $1.25 CODE 1609

BCAA & EAA for MUSCLE BUILD & RECOVERY!

9 Essential Amino Acids of fast absorption, Protein Building Blocks

Amino acids are the subunits that make up proteins. They are necessary for the function of all cells, for tissue repair, and to produce enzymes and neurotransmitters. The body uses 20 amino acids to construct proteins, but nine "essential amino acids" cannot be made by the human body and must be supplied by the diet to achieve proper protein synthesis and maintain overall health. People with limited diets or poor digestion may not get enough essential amino acids from their diet. In contrast to proteins or peptide-bound amino acids, **AMINO BLAST** has all 9 essential amino acids in their pre-digested forms and in the proportions recommended by the National Academy of Sciences to optimize protein synthesis and tissue repair.

You can request at MXNUTRISHOP your AMINO BLAST ADD-IN for your favorite smoothie to boost recovery or check our selected EAA (Essential Amino Acids) products in the store!

Supplement facts		
Serving Size: 2 1/4 Level Teaspoons (approx 5.6 g)		
	Amount Per Serving	**% Daily Value**
Calories	20	
L-Leucine	918 mg	†
L-Lysine (from 1,131 mg L-Lysine Monohydrochloride)	888 mg	†
L-Phenylalanine	751 mg	†
L-Valine	518 mg	†
L-Threonine	466 mg	†
L-Isoleucine	442 mg	†
L-Methionine	432 mg	†
L-Histidine (from 438 mg L-Histidine Monohydrochloride)	319 mg	†
L-Tryptophan	117 mg	†
† Daily Value not established.		

GLUTAMINE, SMOOTHIE ADD-IN $0.75 CODE 1605
SUPPORTS IMMUNE SYSTEM HEALTH
INCREASES RECOVERY

We use **Glutamine** crystals made from a natural fermentation process. This state-of-the-art process creates a unique, purified and isolated Glutamine ideal for supplementation.

Glutamine is the most abundant amino acid found in muscle tissue. During times of stress, including exercise and athletic events, Glutamine is one of the first amino acids to be oxidized. Supplementation with Glutamine may help to support muscle Glutamine levels, prevent muscle tissue breakdown and increase recovery.

The Glutasure™ Advantage: Our Glutamine uses proprietary hyper-particulation process called Glutasure™ technology. Glutasure™ is a pressure driven ceramic membrane process that:

Decreases Glutamine particle size.

Increases Glutamine suspension time in liquid.

Speeds Glutamine absorption into the bloodstream.

You can request at MXNUTRISHOP your GLUTAMINE ADD-IN for your favorite smoothie approximately 30 minutes prior to training and immediately after training to help prevent muscle tissue breakdown and aid muscle recovery. Also check our Glutamine Supplements in the store!

Supplement facts		
Serving Size: 1 Scoop (5 g)		
	Amount Per Serving:	**% Daily Value**
L-Glutamine (Free-Form)	5 g	†
†Daily Value not established.		

FAT BURN, SMOOTHIE ADD-IN $0.90 CODE 158

Pure Acetyl-L-Carnitine! Transports Fatty Acids

Boosts Cellular Energy

OUR FAT BURN Acetyl-L-Carnitine (ALC) is a modified amino acid that supports cellular energy production by assisting in the transport of fat into the mitochondria where it is converted into ATP (cellular fuel). ALC is a highly bioavailable form of carnitine that can cross the blood-brain barrier, where it helps to neutralize free radicals, supports mitochondrial function and helps to maintain normal neurotransmitter activity. Clinical studies suggest that ALC helps to maintain optimal neurological health.

You can request at MXNUTRISHOP your FAT BURN ADD-IN for your favorite smoothie to boost burning fat during your exercise or check our selected Carnitine & Fat Burners products in the store!

Supplement facts		
Serving Size: 1/2 Level Teaspoon (approx. 1.5 g)		
	Amount Per Serving	**% Daily Value**
Acetyl-L-Carnitine (from 1,500 mg Acetyl-L-Carnitine HCl)	1.24 g (1,240 mg)	*
* Daily Value not established.		

CITRIC ACID, SMOOTHIE ADD-IN $0.50 CODE 4835
PREVENT KIDNEY STONES, IMPROVE NUTRIENT ABSORPTION
ACTS AS AN ANTIOXIDANT PROMOVING DIGESTIVE HEALTH!

Citric acid offers several health benefits, including preventing kidney stones, improving nutrient absorption, and acting as an antioxidant.

Key Health Benefits

Prevention of Kidney Stones: Citric acid can help prevent the formation of kidney stones by increasing urinary citrate levels, which inhibits stone formation. It is often recommended for individuals prone to developing calcium oxalate stones.

Antioxidant Properties: As a natural antioxidant, citric acid helps reduce oxidative stress in the body, which is linked to various chronic diseases, including cancer and heart disease. It may also support overall immune and liver health.

Improved Nutrient Absorption: Citric acid enhances the absorption of essential minerals such as calcium, magnesium, and zinc. This is particularly beneficial when these minerals are taken in citrate forms, which are more bioavailable than other forms.

Digestive Health: Citric acid can aid digestion by improving the breakdown of food and enhancing gut health. It may be particularly helpful for individuals experiencing constipation or indigestion.

Skin Health: Citric acid is commonly used in skincare products due to its ability to exfoliate and improve skin texture. It can help smooth the skin and may reduce signs of aging.

You can request at MXNUTRISHOP your CITRIC ACID ADD-IN to add 1 tsp for your favorite smoothie!

TURMERIC, SMOOTHIE ADD-IN $0.75 CODE 4192
SUPPORT JOINT HEALTH, ANTI-INFLAMMATORY, ANTOXIDANT
Good Addition for Smoothies to a Healthy Diet and Active Lifestyle!!

Turmeric (Curcuma longa) root originated in India and is known for its bright color, warm flavor and potential health benefits, having been used for thousands of years in culinary dishes, traditional home remedies, and in Ayurvedic medicine. Our Organic Turmeric Powder makes it easy to add this superfood into your daily SMOOTHIES to help support a healthy diet and active lifestyle.

Benefits of Turmeric Powder

As a superfood, turmeric powder is thought to have many potential health benefits. Curcumin is one of the beneficial compounds found within turmeric and is thought to provide anti-inflammatory support. Turmeric is also known for its potential support of antioxidant activity, which can help protect the body and support overall health. Our turmeric powder provides a

convenient way to add more of this superfood and its helpful compounds into your diet, so you can enjoy their benefits.

One serving (1 tsp. (2 g))

- Calories: 5, Total Carbohydrate 2 g, Iron 1.1 mg

GINGER, SMOOTHIE ADD-IN $0.50 CODE 4193

Anti-inflammatory & Immune support! Blood sugar control!

Ginger Root is a dietary supplement that supports digestion!

Ginger offers numerous health benefits, including:

Anti-inflammatory properties: Gingerol, a bioactive compound in ginger, has potent anti-inflammatory effects, which may help reduce conditions like arthritis and menstrual pain.

Digestive health: Ginger stimulates saliva and bile production, aiding digestion and reducing bloating.

Nausea relief: Ginger is effective in treating nausea, including morning sickness and chemotherapy-related nausea.

Immune support: Ginger has antioxidant and antimicrobial properties that can strengthen the immune system.

Blood sugar control: Ginger may improve insulin sensitivity, making it beneficial for people with diabetes.

These benefits make ginger a valuable addition to a healthy diet.

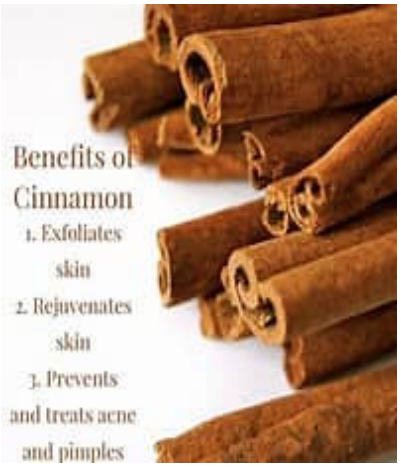
One serving (1 tsp. (2 g))

- Ginger Root 2,000 mg

CINNAMON, SMOOTHIE ADD-IN $0.50 CODE 5125

Support healthy glucose metabolism! Balanced immune system response!

Powerful medicinal properties! Brain health support



Modern scientific studies indicate that cinnamon bark possesses free radical neutralizing properties and may help to support a healthy, balanced immune system response. In addition, cinnamon bark has been found to support healthy glucose metabolism and may help to maintain blood sugar levels already within the normal range.

- Loaded with antioxidants, Anti-inflammatory properties,
- Protection against heart disease, Digestive benefits
- Improved sensitivity to insulin, Blood glucose regulation
- Blood pressure regulation, Triglyceride reduction

One serving (1 teaspoon 1.2g)

- Cinnamon 1,200 mg

CAYENNE PEPPER, SMOOTHIE ADD-IN $0.50 CODE 5955

Support cardiovascular and digestive functions!

With Hydrolyzed Collagen, Glucosamine Sulfate and MSM

Cayenne pepper (Capsicum annuum) has been used as a food and by traditional herbalists for thousands of years. The hot and spicy taste of cayenne pepper is primarily due to a component known as capsaicin. Modern scientific studies have indicated that consumption of Cayenne help to support cardiovascular and digestive functions.

Cayenne pepper offers several health benefits, including:

- **Pain Relief:** Contains capsaicin, which may help alleviate pain and reduce inflammation.
- **Digestive Health:** Stimulates digestion and may boost metabolism.
- **Heart Health:** May improve circulation and support cardiovascular health.
- **Antioxidant Properties:** Rich in antioxidants that help combat oxidative stress.
- **Weight Loss Support:** Can aid in weight management by increasing metabolism.

These benefits make cayenne pepper a valuable addition to your diet!

One serving (1 teaspoon 0.5g)

- Cayenne Pepper (Capsicum annuum) (Fruit) (40,000 heat units) 500 mg

GABA, SMOOTHIE ADD-IN $0.50 CODE 4232

REDUCE YOUR STRESS (Relaxation effect)!

SUPPRESE BLOOD PRESSURE ELEVATION (Reduce hypertension)!

GABA (Gamma-Aminobutyric Acid) is a non -protein amino acid that functions as a neurotransmitter in the human brain. GABA is naturally produced in the body and its presence within the central nervous system may help promote relaxation and ease nervous tension.

One serving (1/4 Level Teaspoon (approx. 500 mg))

- GABA 500 mg

You can request at MXNUTRISHOP your GABA ADD-IN for your favorite smoothie Pos-workout or check our GABA products in the store!

HMB, SMOOTHIE ADD-IN $0.75 CODE 4246

PRESERVES LEAN MASS / ENHANCES RECOVERY

HMB (β-Hydroxy β-Methylbutyrate) is a clinically researched, naturally occurring metabolite of the branched-chain amino acid leucine. HMB normally plays a role in the regulation of protein breakdown in the body, helping to preserve lean muscle tissue. HMB therefore can help to maintain muscle strength and mass when combined with regular exercise and a healthy diet. In addition, it may help to enhance recovery from intense exercise.

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One serving (2/4 level teaspoon)

- Calcium (from Calcium β-Hydroxy β-Methylbutyrate Monohydrate) 200 mg
- HMB (β-Hydroxy β-Methylbutyrate) 1,000 mg

MACA (Lepidium meyenii), SMOOTHIE ADD-IN $0.90 CODE 5956

IMPROVE MOOD & ENERGY / COGNITIVE FUNCTION,

WOUND HEALING, HEALTHY REPRODUCTIVE LIFE

Grown in a region of the Peruvian mountains with a history of cultivating Maca for over 2000 years, this ancient superfood has withstood the test of time to become a hero in the modern life. Maca was historically consumed before battle by Inca warriors, and for good reasons. Maca's natural energy and focus enhancing benefits are ready to revitalize.

This organic superfood from Peru can boost energy, stamina, immune support and sexual health from the comfort of adding in your smoothies or taking as sport nutrition supplement.

One serving (1 teaspoon 5g) Organic Maca Root Blend 2,100 mg

ASHWAGANDHA, SMOOTHIE ADD-IN $0.90 CODE 5957

VIRILITY, ENERGY, STRESS SUPPORT, HELP THE BODY MANAGE STRESS, SUPPORT A HEALTHY IMMUNE SYSTEM

Ashwagandha is a coveted herb in Ayurveda, a system of traditional, natural healing with origins in India. The root is the most beneficial part of this small shrub and is well known for its energizing properties, coining the name, "Indian Ginseng."

Ashwagandha has been identified as having adaptogenic properties, which are thought to be able to support the body's natural response to stress. Also, you can find it in our store to purchase it as sport nutrition supplement.

One serving (2 teaspoons 6g) Ashwagandha Root Powder 450 mg

FUEL UP!

Fueling your body before and after your workout is important for optimizing the results of exercise. Whether your goal is muscle gain, weight-loss or overall well-being; MxNutriShop can help you. Our staff can make you a delicious protein shake with one of our numerous healthy add ins or they can make valuble suggestions to help aid you in your fitness journey. Visit our shop in the Samurai Fitness Center to learn more.