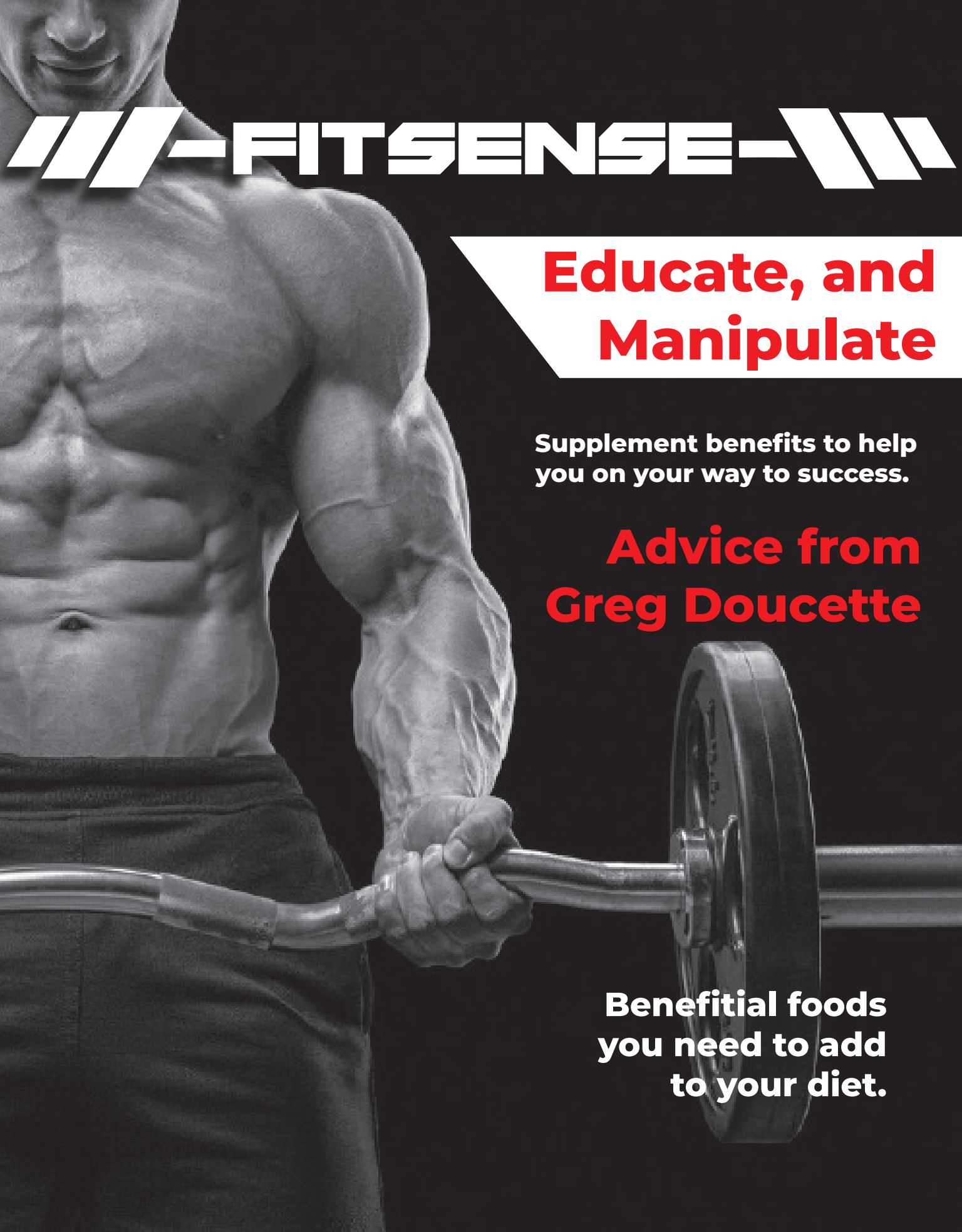

//-FITSENSE-\\
Educate, and Manipulate
Supplement benefits to help you on your way to success.
Advice from Greg Doucette
Benefitial foods you need to add to your diet.

CONTENTS

Why Cardio?

All healthcare experts will agree that being physically active is crucial to keeping your body healthy. It helps your body function at a high level by improving cardiovascular health and muscle strength. Fortunately, individuals have a myriad of options to choose from to keep them active, and all provide countless health benefits, both physical and mental. One of the easiest and most popular forms of exercise is cardio.

Throughout human history, people have been running. Whether for survival or sport, running has persisted throughout. However, running is far from the only form of cardio. From running and jogging to swimming and biking, you can choose from several cardio options. Regardless of the type of cardio you do, the benefits that this physical activity provide you are exceptional.

Physical activity is vital to your overall health, and cardio plays a big role. Even if you prefer lifting weights, you should include cardio because it offers benefits that weightlifting cannot match.

What is Cardio?

Cardio is short for cardiovascular exercise. These exercises work to improve your endurance by increasing your heart rate and breathing rate. It also boosts your blood circulation. The goal is to engage in a moderately intense physical activity that raises your heart rate into the zone where you will burn the most fat and calories. While some forms of cardio are better at burning fat than others, they are all an excellent way of burning calories while improving cardiovascular health.

Benefits

Cardio is an excellent way to stay active and keep your body healthy. Most people are aware of this, but many do not grasp the scope of the benefits cardio offers them. After all, it doesn't just help you burn calories and lose weight. It has plenty to offer you. While some exercises do more in certain areas than others, all cardio exercises can improve your health and life in multiple ways.

Weight Loss

Cardio workouts burn more calories than lifting weights and other workouts. Furthermore, cardio also boosts your metabolism. While these exercises increase your heart rate, they also increase other processes in your body, such as your metabolism.

Cardiovascular Health

Many people forget that your heart is a muscle, and like all muscles, it requires exercise. If you don't work it, it will weaken much quicker over time. Getting your heart pumping at faster rates on a regular basis keeps it in shape and healthy, reducing the risk of heart disease. Cardio helps lower your blood pressure by reducing the levels of bad cholesterol and raising levels of good cholesterol. This will eventually lower your resting heart rate because your heart pumps blood more efficiently.

Mental Health.

Like most exercises, cardio is also great for your mental health. When you engage in cardio of any kind, your body releases endorphins, the body's feel-

good chemical. Your body releases these chemicals during and after your exercise, reducing muscle tension and stress. Additionally, one study on individuals with depression found that after ten days of walking on a treadmill for 30-minute intervals, they reported a significant reduction in their depression symptoms.

Immune System

Cardio increases your heart rate, which causes your blood vessels to widen. As your blood vessels expand, white blood cells can flow better throughout your bloodstream. White blood cells are what protect your body against viruses, bacteria, and other infections. A study conducted by researchers at Pennsylvania State University found that women who did regular moderate aerobic exercise had more antibodies in their bloodstream compared to those who were sedentary.

Boosts Brain Power

Even your brain can reap the benefits of cardio. As you age, specific organs begin to weaken and lose tissue. Your brain happens to be one such organ. However, research has discovered that aerobic exercise can slow tissue loss while improving your cognitive functions. The research showed that adults who were most fit showed fewer reductions in specific areas of their brains. Their brain tissue was healthier, as well. Cardio also improves memory.

Improve Sleep

If you struggle with sleep, whether falling asleep or remaining asleep, engaging in cardiovascular exercise throughout the day may improve your sleep. Individuals who engage in regular physical activity experience better sleep quality and sleep for much longer. It also improves how awake they feel throughout the day, as well as gives them a boost in energy.

Types of Cardio

As we mentioned earlier, you can choose between countless types of cardio. You do not have to stick to running if you don't enjoy it or if you have bad joints. Your chances of finding an exercise that you enjoy and fits your fitness level and overall health are high. Some of the most popular types include:

-Running
-Swimming
-Walking or power walking
-Jump rope
-Dancing
-Boxing
-Cycling
-Rowing
-Stairs or stair climber
-Elliptical machines
-High-intensity interval training

As you can see, your options for cardio exercises are vast. Many of these are cost-effective and can be down at home or around your neighborhood. Options, such as ellipticals, stair climbers, row machines, and more, can be found at a gym. Not only does Fitness Nation have many cardio machines, but we also offer many classes that focus on different types of cardio exercises. Fitness Nation is here to help you with all of your fitness needs.

Recovery and Hydration Since 2010!

Modern BCAA+® Original

Powered by 15 grams of Amino Acids, the Legendary 8:1:1 BCAA Ratio and Enough Electrolytes to Keep you Hydrated; ingredients in Modern BCAA have been clinically shown to Support Recovery and Hydration. Modern BCAA is Vegan Friendly, has Zero Artificial Colors and is Sugar-Free.

15 Grams of Amino Acids

8:1:1 BCAA Ratio- Legendary, High Leucine Ratio

Electrolytes- 654mg Electrolyte Blend for Max Hydration

Sugar Free

0 Carbs

0 Calories

No Artificial Colors or Dyes- in any MSN product ever

Vegan Friendly

Modern BCAA was released in 2010 as the Original 8:1:1 BCAA Ratio Amino Acid Supplement. Modern BCAA's 8:1:1 Ratio means that you get 8 times more Leucine than Valine or Isoleucine in every 30 Serving Bottle of Modern BCAA and a BCAA Ratio 4 Times Higher in Leucine than competing Branched Chain Amino Acid Supplement Powders. After all, Leucine is the Amino Acid most responsible for Muscle Growth and Recovery.

Genetics have a significant influence on many aspects of our life – from our height and eye colour, our weight, and even whether we develop certain health conditions. And now, our recent review has shown that our genetics even influence whether or not we're suited to a certain type of exercise.

To understand how our genetics impact the way we exercise, it's important first to understand why we adapt to exercise in the first place. "Adaptation" refers to the body's ability to make subtle improvements that help it better cope with a new exercise or challenge. One example of this would be increased muscle mass from exercise. These changes in our body help us to be better prepared to do this activity the next time we need to. While we all adapt to exercise, we improve and adapt differently and at different rates, even when we do the exact same exercise.

There are many reasons why this is the case. Various factors, such as diet, sleep, age and whether we leave time to recover between workouts, are all important in how we adapt to exercise. But recently, studies have also shown that the reason we all adapt differently to exercise is largely related
to genetics. In fact, research has shown that there are hundreds or even thousands of genes which influence the way our body responds and adapts to exercise.

Take the ACE gene for example, of which there are two types: ACE I and ACE D. This gene has been shown to be linked to cardiorespiratory and aerobic fitness due to its role in helping deliver oxygen to our body's tissues, as well as regulating blood pressure. It's thought that if you have the ACE I gene, you're better suited to endurance – whereas those with the ACE D gene are thought to be better suited to strength and power, as they aren't as good at regulating blood pressure and oxygen.

Understanding Genetics

Learn the best ways to work with the genetics you have.

AD-APT-ION

To better understand how our genes are related to different types of exercise – and whether they affect the way we adapt to exercise – we conducted a systematic review and meta-analysis. This allowed us to assess all the current evidence which has linked certain genes to different key measures of fitness – including cardiorespiratory fitness, muscular strength and explosive power (how quickly we can go from a standstill to a sprint, for example) – in the average person. We looked at a total of 24 studies which included 3,012 participants altogether.

Based on our analysis, we found that, on average, people saw significant improvements to their fitness when they exercised three times a week for 12 weeks – regardless of their genetics. This is great news, as it shows us that everyone can improve their fitness through exercise regardless of their genetics.

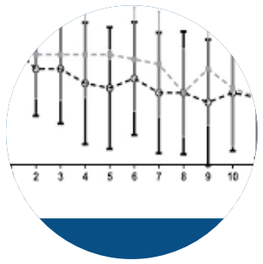
But, we also saw that these fitness improvements weren't always equal. In fact, there were sometimes large differences between people – even those that did the exact same type of exercise for the same amount of time. In some cases, this difference was greater than 10%. For example, we found that for cardiorespiratory fitness, muscular strength, and power, there were on average around 4%, 10% and 4% differences in improvements respectively.

Even after taking into account sex, age, diet and other factors which can affect how we adapt to exercise, our analysis found 13 genes that were directly responsible for influencing these differences. For aerobic training, genes explained 44% of the differences in scores that we saw. For strength training, genes explained around 72%. But for power, genes only explained around 10% of the difference. The rest of these differences can be explained by other variables – such as diet, sleep, recovery time and lifestyle. This shows us what a big impact our genes have on what fitness adaptations we see when we exercise.

Greg Doucette

Top 10 Training Tips

-Greg Doucette

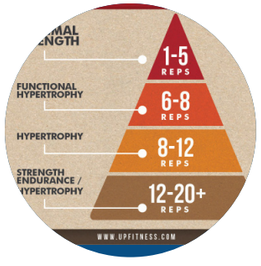


Training Frequency: The biggest mistake people make is only training each body part once a week. Studies have shown that more frequent training results in greater muscle growth. Aim to train each body part every 3-5 days depending or exercise volume, intensity and recovery.

1

2

Rest Between Sets: Rest to Work ratio must fall in the 3:1 to 5:1 range in order to maximize recovery. If you don't rest long enough you won't have full ATP stores which means you will not be able to lift as heavy or as hard thus impeding muscle growth.



Rep Range: Many people make the mistake of doing low reps with heavy weights hoping to maximizing muscle gains. What this does is build strength more than size. If you want maximum muscle growth get the reps up around the 10-12 rep range.

3

4

Time Under Tension (TUT): Sets should take close to 40 seconds or more in order to fully tax the muscle and cause maximum muscle hypertrophy.

Volume: More does not equal better!!! If you're training hard there is no reason to do dozens of sets and be in the gym for 2+ hours. I usually do 8-10 hard sets for each specific muscle (not counting warm up sets). If you're not pushing your limits you may have to do more sets to make up for your lack of intensity.

5

6

Form: Improper exercise form will not only diminish your gains but may also cause injury.

Exercise Selection: Be sure to choose the exercises that best stimulate the muscle you want to improve. All too often people do exercises that barely stimulate the area they want to improve. Skipping squats and deadlifts in exchange for hip thrusts for example is not going to do you any favors.

7

8

Effort: Training hard gets results!!! Even the best training program will not work If you don't do the work. When your doing a set think to yourself "Could I have done another set for $1000". If the answer is yes, you had more to give.

Environmental Conditions: If it's hot in the gym and muggy it's going to be hard to train effectively. Dress appropriately for your training conditions. Don't make the mistake of thinking that the more you sweat the better. A light sweat is good but wearing 3 layers of clothing to increase sweating is only going to reduce your ability to push as hard.

9

10

Intra-workout Nutrition/Hydration: Depending on your pre-workout meal you may or may not need an intra-workout supplement. I personally prefer to use "Battle Juice" by AG while training. If I'm low on energy it gives me the fuel I need to finish my workout and prevent going catabolic. If your workouts are brief you may only need some water to stay hydrated.

Benefits beyond the mat

Yoga, an ancient practice and meditation, has become increasingly popular in today's busy society. For many people, yoga provides a retreat from their chaotic and busy lives. This is true whether you're practicing downward facing dog posture on a mat in your bedroom, in an ashram in India or even in New York City's Times Square. Yoga provides many other mental and physical benefits. Some of these extend to the kitchen table.

Types of yoga

There are many types of yoga. Hatha (a combination of many styles) is one of the most popular styles. It is a more physical type of yoga rather than a still, meditative form. Hatha yoga focuses on pranayamas (breath-controlled exercises). These are followed by a series of asanas (yoga postures), which end with savasana (a resting period). The goal during yoga practice is to challenge yourself physically, but not to feel overwhelmed. At this "edge," the focus is on your breath while your mind is accepting and calm.

A better body image

Yoga develops inner awareness. It focuses your attention on your body's abilities at the present moment. It helps develop breath and strength of mind and body. It's not about physical appearance.

Yoga studios typically don't have mirrors. This is so people can focus their awareness inward rather than how a pose — or the people around them — looks. Surveys have found that those who practiced yoga were more aware of their bodies than people who didn't practice yoga. They were also more satisfied with and less critical of their bodies. For these reasons, yoga has become an integral part in the treatment of eating disorders and programs that promote positive body image and self-esteem.

Becoming a mindful eater

Mindfulness refers to focusing your attention on what you are experiencing in the present moment without judging yourself.Practicing yoga has been shown to increase mindfulness not just in class, but in other areas of a person's life.

Researchers describe mindful eating as a non-judgmental awareness of the physical and emotional sensations associated with eating. They developed a questionnaire to measure mindful eating using these behaviors:

-Eating even when full (disinhibition)
-Being aware of how food looks, tastes and smells
-Eating in response to environmental cues, such as the sight or smell of food
-Eating when sad or stressed (emotional eating)
-Eating when distracted by other things

The researchers found that people who practiced yoga were more mindful eaters according to their scores. Both years of yoga practice and number of minutes of practice per week were associated with better mindful eating scores. Practicing yoga helps you be more aware how your body feels. This heightened awareness can carry over to mealtime as you savor each bite or sip, and note how food smells, tastes and feels in your mouth.

A boost to weight loss and maintenance

People who practice yoga and are mindful eaters are more in tune with their bodies. They may be more sensitive to hunger cues and feelings of fullness.

Researchers found that people who practiced yoga for at least 30 minutes once a week for at least four years, gained less weight during middle adulthood. People who were overweight actually lost weight.

Overall, those who practiced yoga had lower body mass indexes (BMIs) compared with those who did not practice yoga. Researchers attributed this to mindfulness. Mindful eating can lead to a more positive relationship with food and eating.

Enhancing fitness

Yoga is known for its ability to soothe tension and anxiety in the mind and body. But it can also have an impact on a person's exercise capacity.

Researchers studied a small group of sedentary individuals who had not practiced yoga before. After eight weeks of practicing yoga at least twice a week for a total of 180 minutes, participants had greater muscle strength and endurance, flexibility and cardio-respiratory fitness.

Cardiovascular benefits

Several small studies have found yoga to have a positive effect on cardiovascular risk factors: It helped lower blood pressure in people who have hypertension. It's likely that the yoga restores "baroreceptor sensitivity." This helps the body senses imbalances in blood pressure and maintain balance.

Another study found
that practicing yoga improved lipid pro files in healthy patients as well as patients with known coronary artery disease. It also loweredexcessive blood sugar levels in people with non-insulin dependent diabetes and reduced their need for medications. Yoga is now being included in many cardiac rehabilitation programs due to its cardiovascular and stress-relieving benefits.

Before you start a new exercise program, be sure to check with your doctor.

Researchers are also studying if yoga can help people with depression and arthritis, and improve survival from cancer.

Yoga may help bring calm and mindfulness to your busy life.

More Energy

ELECTROLYTES + NO SUGAR

WATER MADE ACTIVE

5 Best foods

Try adding more of these delicious foods to your diet in order to help you on your journey to a healthier lifestyle.

1. Popcorn

In addition to being high in fiber, popcorn also contains phenolic acids, a type of antioxidant. In addition, popcorn is a whole grain, an important food group that may reduce the risk of diabetes, heart disease, and hypertension in humans. Whole grains are known to offer many health benefits to humans.

2. Chicken

A food rich in protein, chicken can help with weight management and reduce the risk of heart disease. Chicken contains the amino acid tryptophan, which has been linked to higher levels of serotonin (the “feel good” hormone) in

3. Fish

Fish is filled with omega-3 fatty acids and vitamins such as D and B2 (riboflavin). Fish is rich in calcium and phosphorus and a great source of minerals, such as iron, zinc, iodine, magnesium, and potassium.

4. Greek yogurt

Greek yogurt is a type of yogurt that’s high in protein and other nutrients like vitamin B12, calcium, and selenium. It’s linked to a few health benefits, such as supporting muscle and bone health, and certain types may help contribute to a healthy gut.

5. Avocado

Avocados are a source of vitamins C, E, K, and B6, as well as riboflavin, niacin, folate, pantothenic acid, magnesium, and potassium. They also provide lutein, beta carotene, and omega-3 fatty acids. Avocados contain high levels of healthy, beneficial fats, which can help a person feel fuller between meals.

SUPPLE-EMENTS

Are supplements needed?

Use of supplements contributes substantially to total vitamin and mineral intakes at the population level. Intake of vitamin B6, thiamin, and riboflavin among US adults is at least five times higher from supplements than from foods, and intakes are 15 to 20 times higher for supplements for vitamins B12 and E. Consequently, supplement use considerably reduces the proportion of the general population with inadequate nutrient intake.

This is especially true for vitamins and minerals identified as “shortfall” nutrients such as calcium and vitamin D. Despite the high use of supplements, inadequate intakes of micronutrients are still common in high income countries, where dietary patterns are typically energy rich but nutrient poor.

In low and middle income countries, where specific micronutrient deficiencies are prevalent (eg, of iodine, iron, zinc, and vitamin A), supplementation is recommended when food based approaches such as dietary modification, fortification, or food provision are unable to achieve inadequate intake. In the US and other countries, food fortification and enrichment such as the addition of iodine to salt, vitamin D to milk, and B1 and B3 vitamins to refined flour have contributed to the virtual elimination of their syndromes of deficiency (goitre, rickets, beriberi, and pellagra, respectively).

The widespread use of vitamin and mineral supplements in high income countries seems to contribute to an increase in population prevalence of intake above the upper tolerable level (box 1). Although the overall proportion of US adults with intakes

above the upper level is below 5% for most nutrients, some population subgroups may have high rates of excess intake. For example, in a Canadian national survey, over 80% of children aged 1-3 years who took dietary supplements consumed vitamin A and niacin at levels above the upper limit.18 In the US, excessive intake was noted for vitamin A (97%) and zinc (68%) among toddlers who were given supplements. High quality evidence is lacking on the long term adverse effects of excess intake for several nutrients so it is unclear whether this is a cause for concern.

Do supplements protect against non-communicable diseases?

It remains controversial whether supplements are effective in reducing the risk of non-communicable diseases. In contrast to results of observational studies, the accumulated evidence from randomised controlled trials does not support benefits of supplements in reducing risks of cardiovascular disease, cancer, or type 2 diabetes in healthy people with no clinical nutritional deficiencies.

What next?

To date, randomised trials have largely shown no benefit of vitamin, mineral, and fish oil supplements on the risk of major non-communicable diseases in people without clinical nutritional deficiency. These results contrast with findings from observational studies, where supplemental nutrient intakes are often associated with a reduced risk of these diseases. The apparent associations from observational studies may result from unknown or unmeasured confounding factors such as socioeconomic status and lifestyle factors, including a better overall diet.

BE THE BEST YOU

0 36000 29145 2