

NEWSLETTEF

NUTRITION E-SSENTIALS



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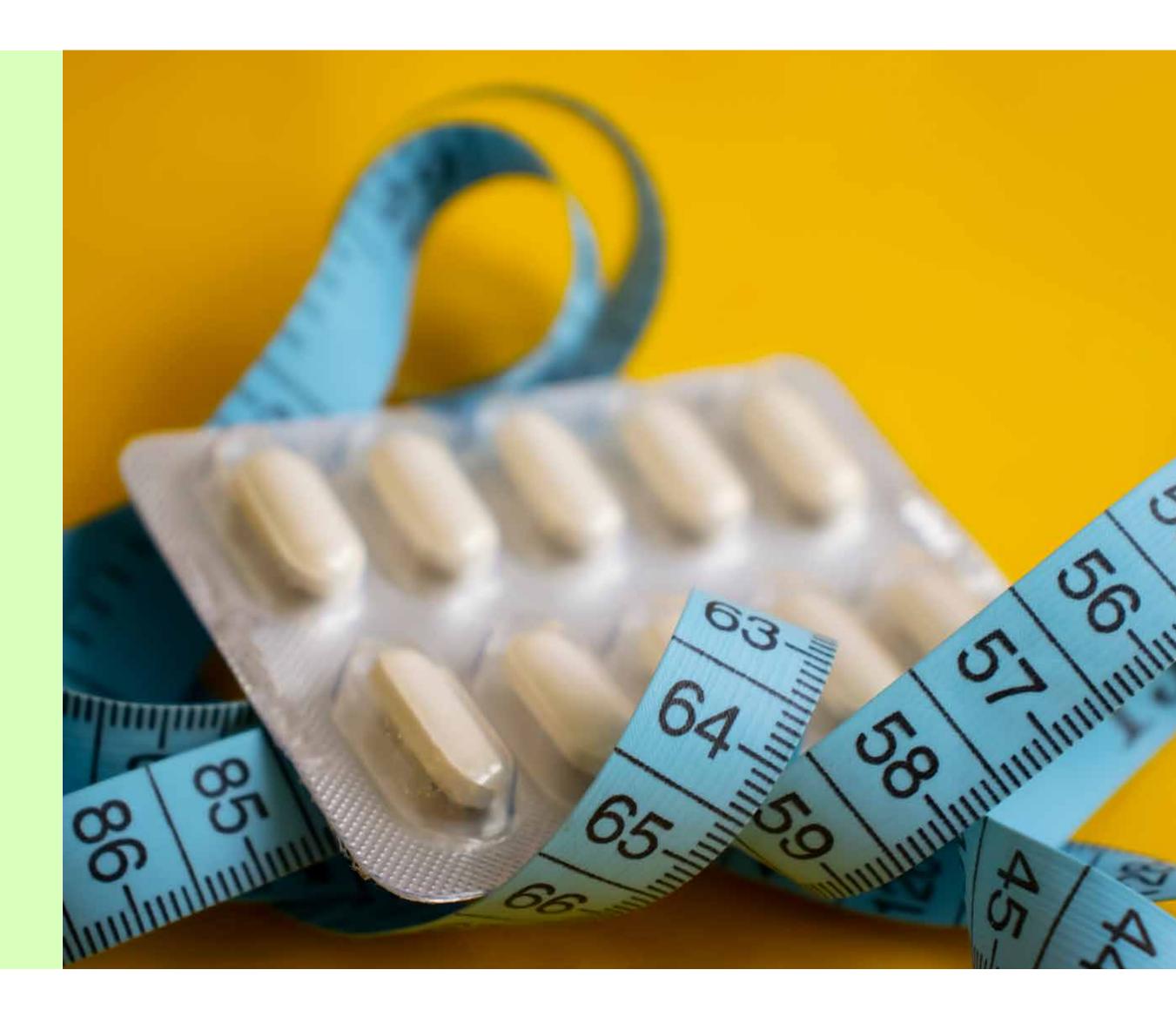


Prescription diet aides, weight loss, and the rest of us



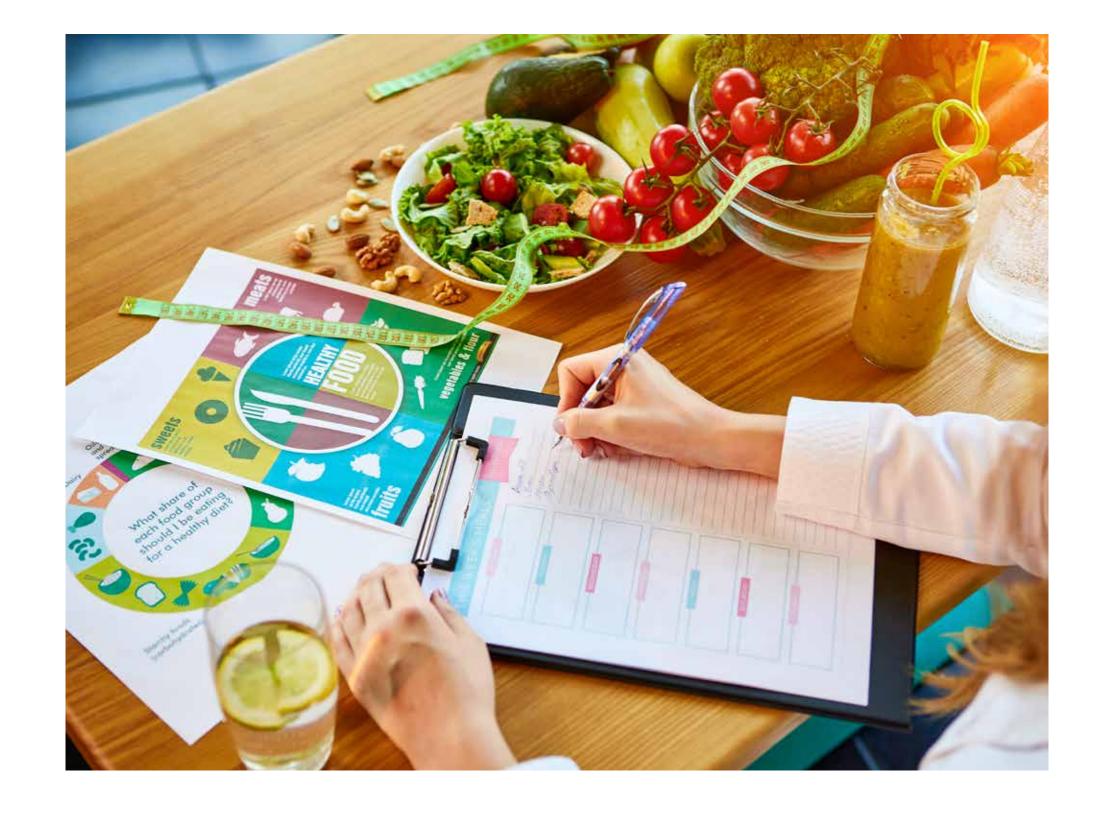
by Kent L. Bradley, M.D., MBA, MPH, Chief Health and Nutrition Officer, Herbalife

Headlines are buzzing with the excitement of drugs known as GLP–1 agonists and now GIP receptor agonists. It is expected that the Food and Drug Administration (FDA) will soon designate Mounjaro, to



join Wegovy and Ozempic as the latest diabetes medication approved for treating weight loss. As these drugs enter the market more questions arise about safety and who exactly should be using them. These drugs have been a game changer for some people facing chronic and severe obesity who were unsuccessful in losing weight previously.

I have heard the stories of countless numbers of individuals who have improved their health, beginning with a change in their mindset about their ability to make a change, followed by a program that then helped them lose the weight. No injections needed. Yet, globally, the health of many continues to decrease as their body fat continues to increase; so it's no wonder why there is so much excitement for a medical prescription approach to weight loss.



As a board-certified public health and preventive medicine physician, I am taught to look at what can be supported by many, and to move upstream. In a society that prioritizes quick fixes and instant gratification, these drugs are exciting. But despite all the buzz, I have to ask, what is the approach that is focused on overall health and wellbeing, that is well supported by science, and is scalable for the good of the public? It remains the tried-and-true combination of regular exercise, a balanced diet and lifestyle changes.

GLP-1 agonist drugs are not new. They were first approved by the FDA in 2005 to treat Type-2 Diabetes. They work by lowering blood sugar levels and increasing satiety – that feeling of fullness – to prevent overeating. Tirzepatide, the active ingredient in Mounjaro, targets the brain's hunger signals, reducing appetite which may lead to weight loss. And while loss of hunger may cause you to eat less – does it cause you to eat healthy? Our bodies still need a constant daily consumption of important macro and micronutrients.



These drugs have the potential to help people facing chronic and severe obesity who were unsuccessful in losing weight previously. However, there are potential risks and drawbacks of these drugs, such as using them for weight loss without proper diet and exercise can result in decreased muscle density, malnutrition, cardiovascular impacts and other known issues. Most notably, the majority of patients who stop taking these drugs gain the weight back— repeating the frustrating

cycle that so many people experience.

Simply put, there is no silver bullet when it comes to losing weight. Sustainable weight loss is a lifelong commitment that starts with behavioral change. Long-term results happen by setting goals, being physically active, having a balanced diet, getting adequate sleep and understanding how nutrition impacts your body.

Weight loss and wellness companies should not turn their backs to potential customers who have taken these drugs. People will always need support in forming new habits and making sustainable changes. Companies like ours support people on their overall health and wellness journey – whether it's losing weight, building muscle, or supplementing their nutrition through our products. Our products and services are not a substitute for prescribed medication; they are a way to help people build the right habits that can serve them for a long time. Without a doubt, weight loss drugs are likely here to stay, and they have the potential to improve lives and open doors to people who can truly benefit from them. But good health is more than weight loss. The ultimate goal is often more than a number on a scale-- but overall improved health and a sense of wellbeing. To that end, an approach as a society to expand access to healthier foods, better nutrition education, a supportive community, increased norms that promote physical activity, and often a coach who can guide you on your journey remains the key elements to meet that goal.



Sleep and nutrition



by Dr David Heber, M.D., PhD, FACP, FASN, Chairman, Herbalife Nutrition Institute

Quality sleep is essential to our overall wellbeing. Without adequate sleep, you can't maintain the pathways in your brain that let you learn and create new memories, and it's harder to concentrate and respond quickly.

Poor-quality sleep increases the risk of disorders¹, including high blood pressure, cardiovascular disease, diabetes, depression, and obesity. In fact, inadequate sleep has been shown to lead to low energy and fatigue during the day which can lead to overeating and weight gain.

Sleep is integral to our circadian rhythm, which is made up of over 100 internal biological clocks synchronized with environmental cues (such as light and temperature) and typically coincides with the sun's cycle, which causes sleepiness at night and wakefulness in the morning.





Improving circadian health

Reducing environmental triggers that interfere with sleep is key to reset the circadian rhythm. Some helpful strategies include setting a consistent sleeping and waking times, avoiding daytime naps, and exercising in the day.

There is also a method called the restricting sleep strategy, which aims to decrease the actual amount of time spent in bed to establish and maintain a healthy circadian rhythm.

Food, sleep, and nutrition

What you eat and when you eat can have a big impact on the quality and length of your sleep. For example:

Low-fat meals

Low-fat meals are digested more quickly, and healthy carbohydrates help stimulate the production of different brain chemicals – the ones that help you relax and get to sleep.



Omega-3 fatty acids

Omega-3 fatty acids – found in fish, nuts, and seeds – assist in regulating the body's internal clock, in part through effects on the release of melatonin, a hormone that regulates the sleep cycle



Caffeine and alcohol

Caffeine and alcohol can disrupt normal sleep patterns and make it harder to reach the deepest stage of sleep



Fluid intake

Too much fluid intake after dinner can result in a full



bladder that interrupts sleep

Inadequate sleep can lead to shifts in levels of some of the body's hunger hormones. Leptin is a hormone secreted by fat cells, and one of its jobs is to signal satiety to the brain. When you don't get enough sleep, leptin levels plummet and this can increase hunger.

Sleep deprivation also increases an appetite-stimulating hormone called ghrelin. This explains why sleep-deprived people tend to snack more, in an attempt to keep energy levels up.



Nutritional supplements and sleep

Minerals such as magnesium have been shown to help support calming before sleep, so it's often used as part of a good sleep hygiene regimen. The amino acid tryptophan is known to help the quality of sleep through its conversion in the body to melatonin and serotonin.

Herbal supplements can also help to prepare for sleep especially those provided in herbal teas such as chamomile, valerian root, lemon balm, lavender, and passionflower. These types of herbs have been traditionally used for relaxation before sleep.

Melatonin is a hormone produced in the brain which helps to support deep and restful sleep. The human body produces this hormone as the sun sets and the darkness of evening takes over. Although it's naturally produced in the body, taking a supplement with melatonin can help support a good night's sleep. Melatonin as a supplement has been safely used for years as a sleep aid and has no significant side effects. Melatonin should only be suggested for those who have difficulty falling asleep. It's often recommended to use melatonin approximately 1–2 hours before bedtime.

Footnotes

https://www.cdc.gov/bloodpressure/sleep.htm



Protecting brain health



by Dr Gary Small, M.D., Member, Nutrition Advisory Board, Herbalife

Around the entire world, more people are living longer lives. According to the United Nations Population Division¹, life expectancy at birth is expected to rise to 77.3 globally and nearly 80 years in Asia. When we think about aging, we often think of our skin, bone, lungs, or heart health. But what about our brain — arguably one of the most important organs in the human body?

Every brain changes with age, and mental function changes along with it. As we understand brain development and aging, interesting questions spring up: How do we maintain cognitive function throughout life? What can we do to protect cognitive health as we age?



Brain aging throughout life stages

Everyone has memory blips from time to time. As we age, these kinds of slip-ups may happen more often. There are 3 natural stages of brain aging:



Normal aging (memory slips are mild and relatively stable)

Mild cognitive impairment (cognitive challenges are more frequent but don't interfere with independence) **Dementia** (cognitive decline interferes with a person's ability to take care of themselves)

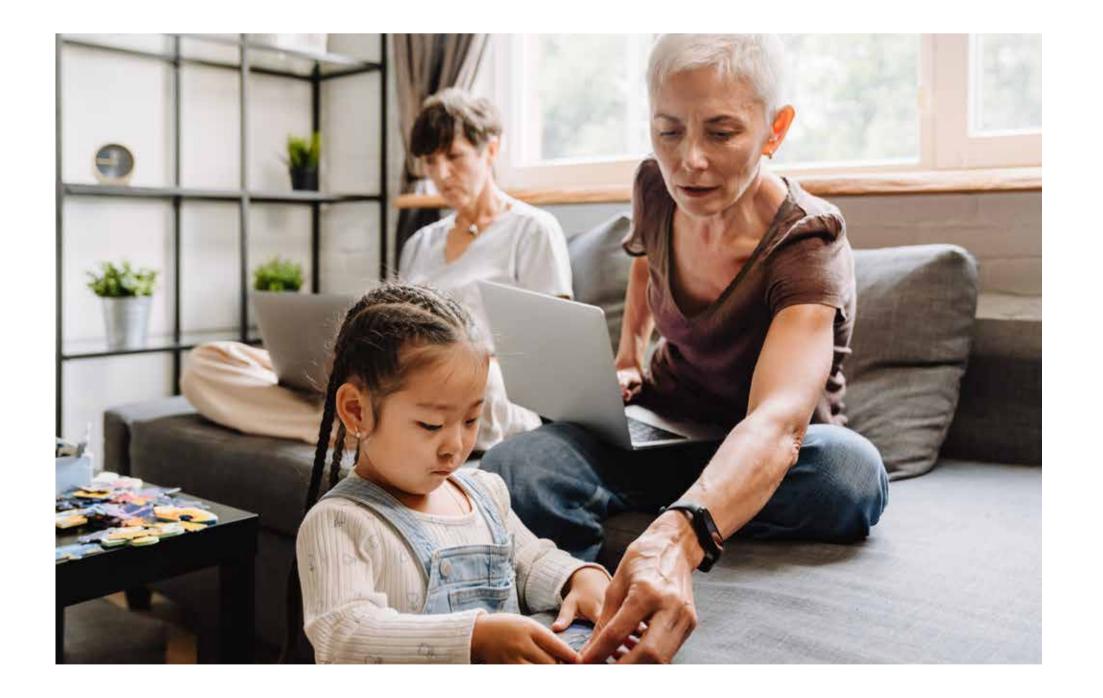
A recent study on aging and the brain² showed that memory performance declines from middle age onwards. This is particularly true for recall for people with normal aging and less so for recognition. Declines in recall are also a characteristic of the memory loss seen in Alzheimer's disease.



How can we protect brain health?

Brain aging is inevitable to some extent, and it affects everyone differently based on genetics, lifestyle, and the environment. A growing body of evidence suggests that people who experience the least decline in cognition and memory share a certain healthy and active lifestyle.

Moreover, populations with extreme longevity, where many people live for 100 years or more, have a few traits in common: a diet with plenty of antioxidant fruits and vegetables, healthy grains, and protein, as well as regular physical activity³, and strong social networks⁴.



Exercising the brain early

Research has consistently shown that people who spend more time in mentally stimulating activities, such as reading, playing word games, or learning a new skill, have a greater likelihood of sustaining and even improving memory⁵, processing speed, attention, and perception.

Like a muscle, the brain appears to perform better when it gets regular exercise. Mental stimulation has been shown to activate neural circuits and is associated with lower Alzheimer's risk. Educational achievements, bilingualism, or doing puzzles have all been shown to lower the risk of dementia. Memory training can also improve memory recall and help a person maintain higher cognitive performance for five or more years.

Mind your medicine

It's important to partner with a healthcare professional to manage overall wellness. Medicines for treating hypertension and high cholesterol are associated with better brain health⁶ and longer life expectancy.

Keep a positive outlook

It's true what they say: optimists live longer than pessimists. And optimism can be learned. Some find a positive outlook through spirituality or harmony with nature. Practicing <u>mindfulness, yoga, or meditation</u> can help individuals get started on this track.

Footnotes

1	https://www.weforum.org/agenda/2023/02/charted-how-life-expectancy-is-changing-around-the-world/
2	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2596698/#:~:text=The%20brain%20shrinks%20with%20increasing,levels%20of%20neurotransmitters%20and%20hormones.
3	https://www.ncbi.nlm.nih.gov/pubmed/12586857
4	https://blog.frontiersin.org/2018/06/18/aging-neuroscience-social-ties-memory-brain-cognition/
5	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6581488/
6	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3874398/



Exercise and gut health

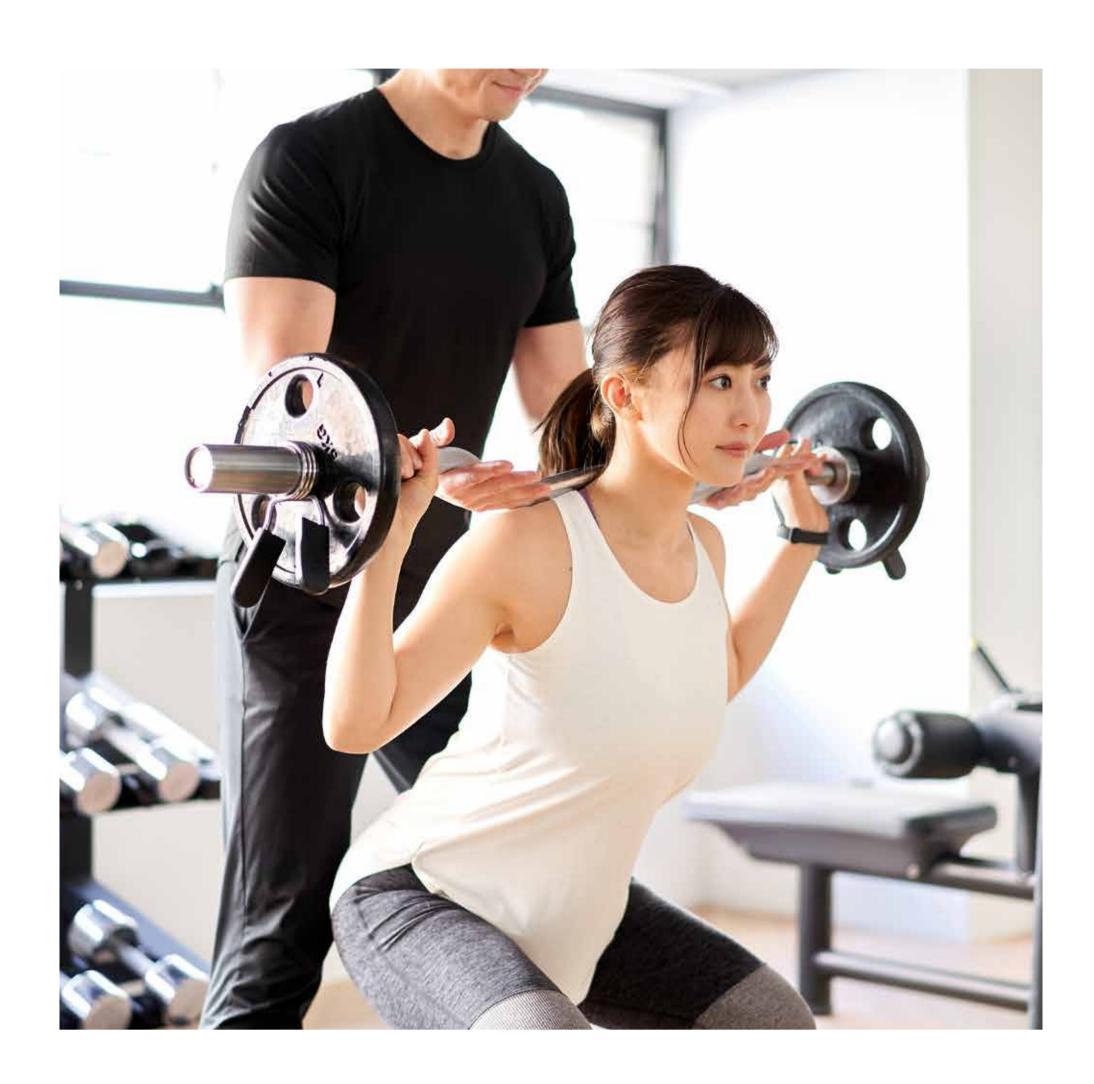
How the microbiome affects athletic performance



by Dana Ryan, Ph.D., MA, MBA, Director, Sports Performance, Nutrition and Education, Herbalife

While there are multiple ways to improve an individual's sports performance, a focus on gut health can be incredibly beneficial too. The internal environment of our gut is as important if not more than our external environment. Not only has the health of our internal environment, or microbiome, been associated with physical health but mental health as well.





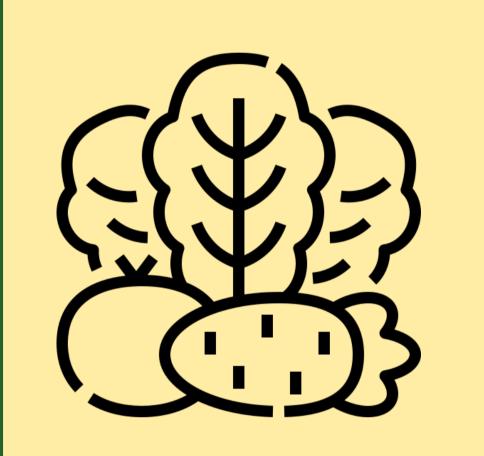
How exercise and digestion work together

One of the reasons that the health of the microbiome is so important is that it is home to thousands of strains of beneficial bacteria that help break down foods, allowing us to obtain more nutrients from foods. When we combine exercise with a high-fiber, high-nutrient diet, research has shown that this can help increase good bacteria in the gut.

When there are not enough good bacteria, the impact on our digestive system can be significant. Common symptoms may include cramping, heartburn and irregularity. However, a healthy microbiome has been shown in the literature to have positive impacts during exercise, such as increasing the oxygen supply to working muscles.

Similarly, regular physical activity is also good for our gastrointestinal health. According to the Journal of the International Society of Sports Nutrition¹, exercise can promote a healthier gut, marked by a more diverse microbiome and a higher abundance of beneficial gut bacteria.

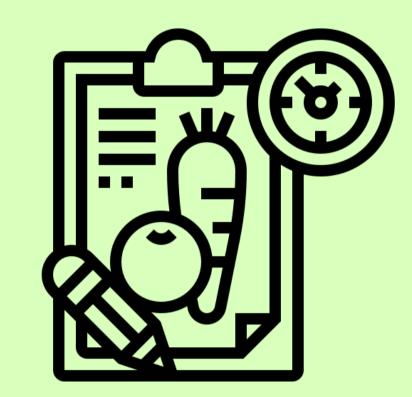
Ways to improve gut health



Consume enough fiber

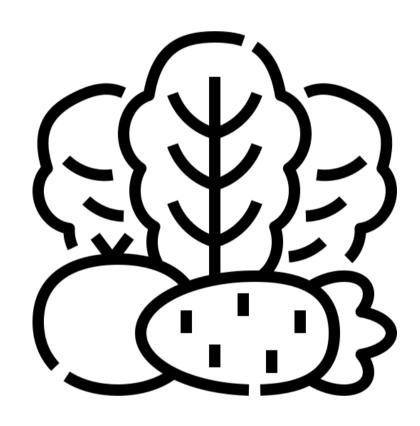


Get some good bacteria



Keep a food log





Consume enough fiber

Fiber is found in foods like fruits, vegetables, beans, and whole grains. Adults should be eating about 25 grams of fiber a day, but the average intake among adults in the U.S. is only about a third of that. While we want to consume fiber throughout the day, the one time we want to avoid it is immediately before exercise.

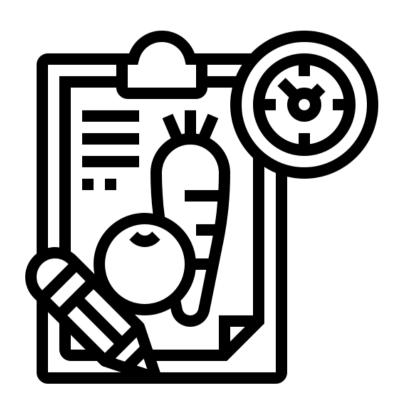






Get some good bacteria

Many foods, such as yogurts, miso, tempeh, and kefir, as well as pickled foods like cucumber pickles, sauerkraut, and kimchi, contain healthy bacteria that can benefit the gut. Many of us fall short of fiber daily intake recommendations, so taking a supplement can help.



Keep a food log

Documenting daily food intakes can help pinpoint any digestive issues that might have a negative impact on a person's training regime.



Footnotes

https://jissn.biomedcentral.com/articles/10.1186/s12970-020-00353-w#Sec19



Herbalife in the news

Dietary recommendations for children

LionhearTV, February 2023

Dr Kent Bradley Chief Health and Nutrition Officer, Herbalife





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Nutrition's role in physical fitness

Next Economy, February 2023

By Dana Ryan, Director, Sports Performance Nutrition and Education, Herbalife

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Herbalife finds top unhealthy habits to drop in 2023

Active Age, February 2023

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19 Herbalife products recognized with SNQ (Symbol of National Quality) UDN Taiwan, February 2023

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Obesity is a complex issue requiring social support

Business Mirror, March 2023

Stephen Conchie Regional President – APAC and China, Herbalife



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Addressing overweight and obesity issues in Vietnam

Suc Khoe Doi Song, April 2023

Dr. Luigi Gratton, M.D., MPH Vice President of Training, Herbalife

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Excellence awards received in Asia-Pacific



SOUTH KOREA 2023 The Most Trusted Brand Award (Grand Prize) for 11 consecutive years





VIETNAM Top 500 Largest

Company in Vietnam by Vietnam Report for fourth consecutive time



EARNINGS

Q1 2023 earnings

012023 Global Net Sales \$13 Billion

*For Herbalife earnings, India is included as part of Asia Pacific (APAC) region

012023 **APAC* Net Sales 413.6** Million

