

CBD & SPORTS



By Roald Tromp

Agenda

- Speakers background
- Cannabis & Sports?
- CBD industry
- CBD how does that work?
- Sports Nutrition Industry and CBD
- Athletes behaviors





Roald Tromp

1964 Amsterdam, The Netherlands

Bachelor PE 1985, MBA Sales

International Sales

(Cybex, Matrix, T-Fitness & E-Njoint)



The NL & Cannabis



1968



CBD
SPORTS

The NL & Cannabis



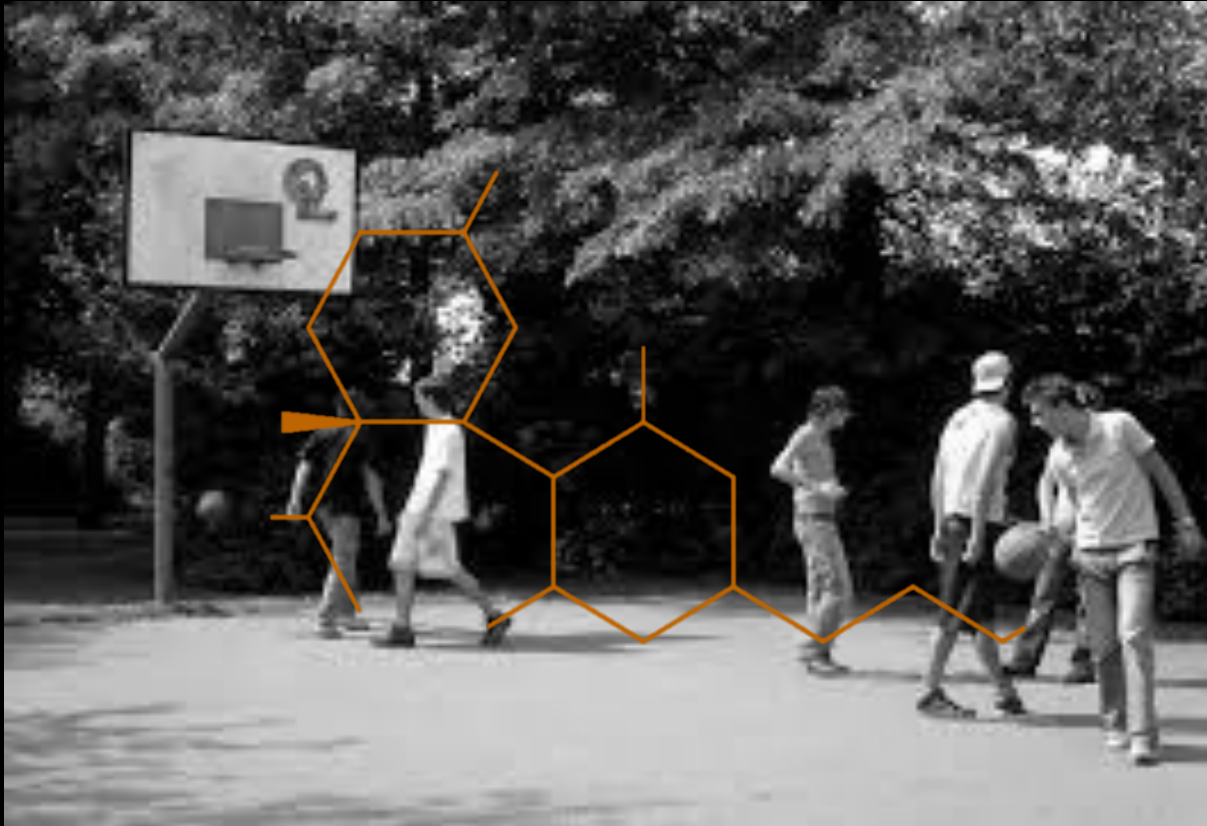
Jogs



Blowers



The NL & Cannabis



CBD IS GOOD FOR YOU!

Mainstream CBD vs. CBD & Sports

The BIG difference!

Medicinal Cannabis > Sick people
CBD Supplements > Healthy people

CBD IS GOOD FOR YOU!



CBD IS GOOD FOR YOU?

**CBD
SPORTS**

| Oils | Balms | Supplements | Tablets |

CBD IS GOOD FOR YOU



Relieve Pain

Fight Inflammation

Improve Mood

Reduce Stress

Better Sleep

Recover Faster

Better Focus

Enhance Blood Flow

Traditional CBD products







CBD SPORT SUPPLEMENTS

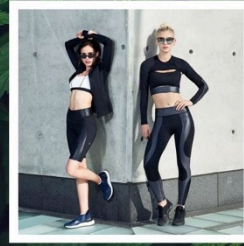


30ML 300MG





Bed Sheets



Sports Active wear



Toilet Paper



Toothpicks



Intimacy Lubricant



Smoothies



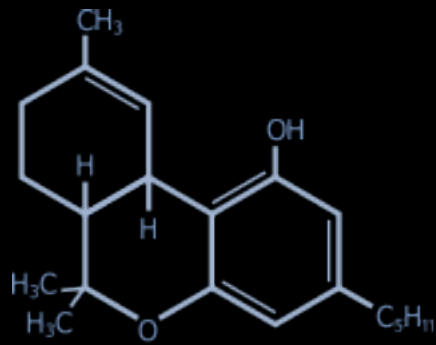
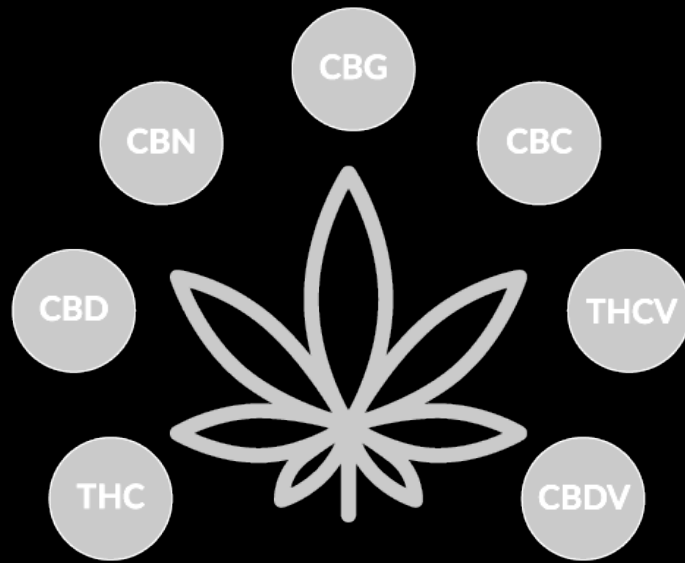
Facemasks



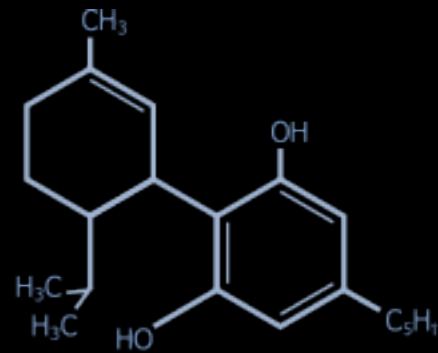
Potato Chips



Tooth Paste



THC



CBD



FULL SPECTRUM



TERPENES



CANNABINOIDS
W/ THC

BROAD SPECTRUM



TERPENES



CANNABINOIDS
NO THC

CBD ISOLATE

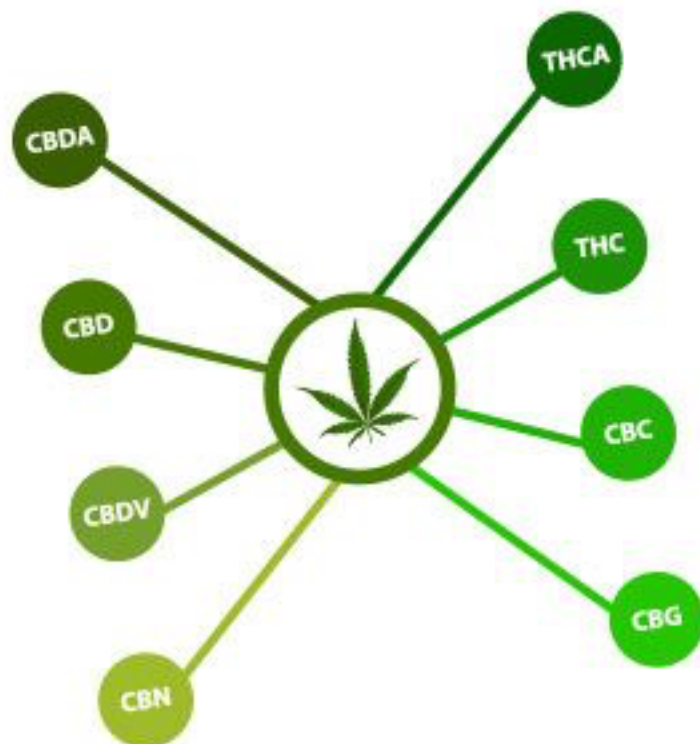


99.9% CBD



NO THC

CANNABINOIDS & TERPENES



TERPENES

Terpenes are oils found in nature which may provide medicinal properties and are responsible for the aromatic nuances of various plant strains.

Whichever dominant terpenes are produced in each plant interact with cannabinoids and play a vital role in the effects of the plant on the human brain and body. They can increase and decrease dopamine and serotonin production, speed up THC absorption, relieve chronic pain, and alter mood.

[View our menu photos for complete terpene profiles on all our products!](#)



Alpha pinene:

RESIN

Energy booster, helps asthma, aids memory. Also found in orange peel, pine & parsley.



Beta-caryophyllene:

SPICE

Prevents anxiety, reduces inflammation, relieves pain. Also found in hops, pepper & oregano.



Camphene

WOOD

Anti-fungal, antioxidant, antitumor. Conveys the aroma of fir needles & wood.



Eucalyptol

CAMPHOR

Analgasic, cough suppressant, antiseptic. Also found in bay leaves, sweet basil, & rosemary.



Limonene

CITRUS

Stress relief, anti-depressant, weight loss. Also found in citrus fruits, rosemary & peppermint.



Linalool

FLOWER

Anti-inflammatory, pain reliever, sleep aid. Also found in lavender, laurel & mint.



Myrcene

WOODS

Anti-inflammatory, muscle relaxant, sedative. Also found in hops, mango & lemongrass.

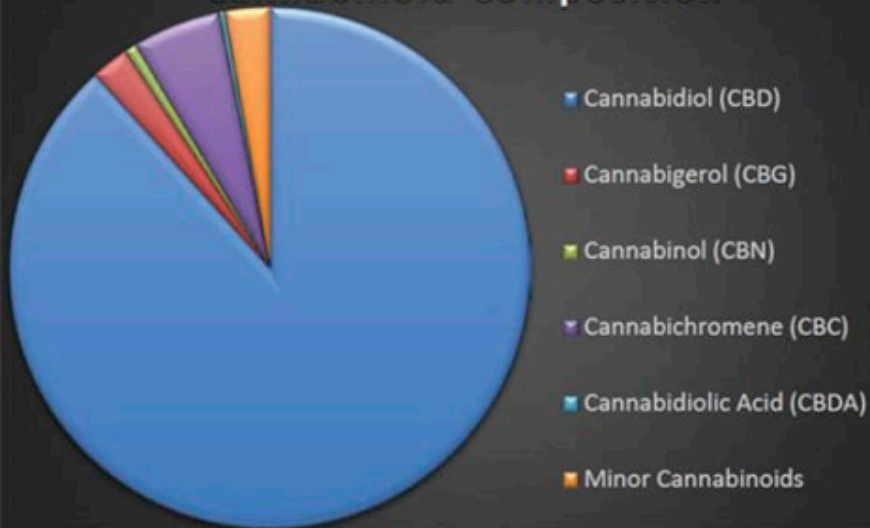


Terpinolene

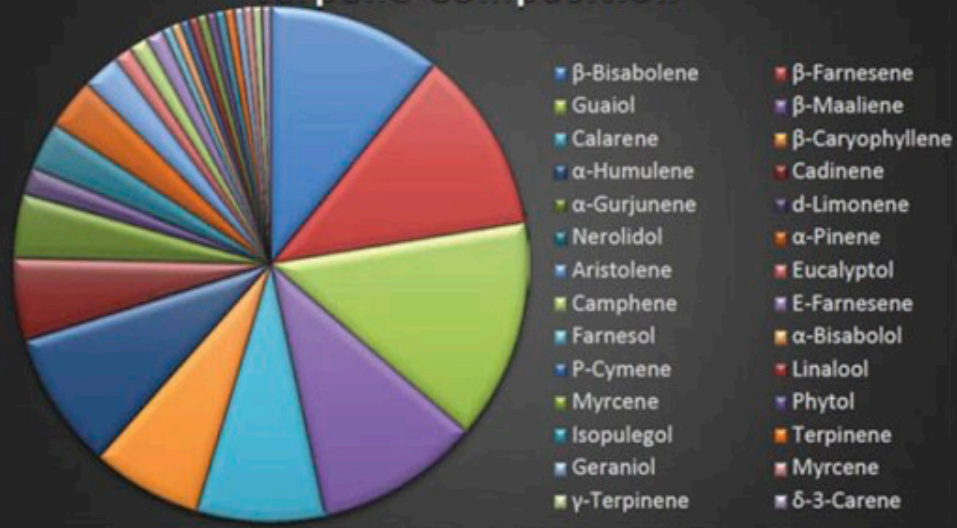
HERB

Anti-cancer, oxidative, antibacterial, anti-fungal. Also found in nutmeg, tea tree, apples, curcumin, & black.

Cannabinoid Composition

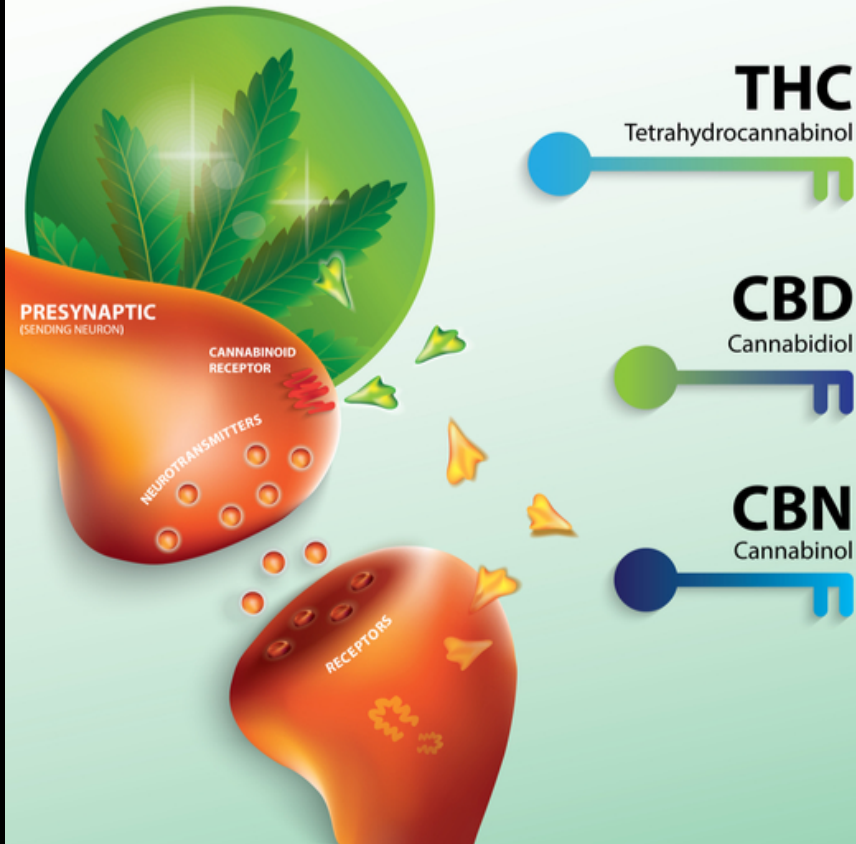


Terpene Composition



The Human Endocannabinoid System

CBD, CBN and THC fit like a lock and key into existing human receptors. These receptors are part of the endocannabinoid system which impact physiological processes affecting pain modulation, memory, and appetite plus anti-inflammatory effects and other immune system responses. The endocannabinoid system comprises two types of receptors, CB1 and CB2, which serve distinct functions in human health and well-being.



CB1 receptors are primarily found in the brain and central nervous system, and to a lesser extent in other tissues.



CBD does not directly "fit" CB1 or CB2 receptors but has powerful indirect effects still being studied.



CB2 receptors are mostly in the peripheral organs especially cells associated with the immune system.

Receptors are found on cell surfaces

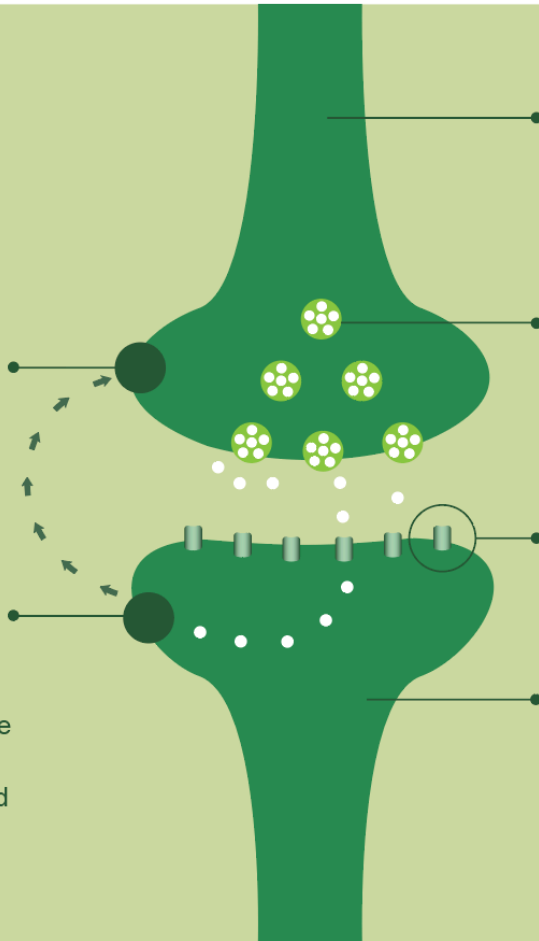




Cannabinoids Receptor

Cannabinoids

Natural chemicals found in the body and in cannabis, that either bind to or stimulate the cannabinoid receptors found in the brain and around the body



Presynaptic

The neuron that sends messages by releasing neurotransmitter chemicals, when it receives a signal to react

Neurotransmitters

Chemical messages that travel from one brain cell to the other

Receptor

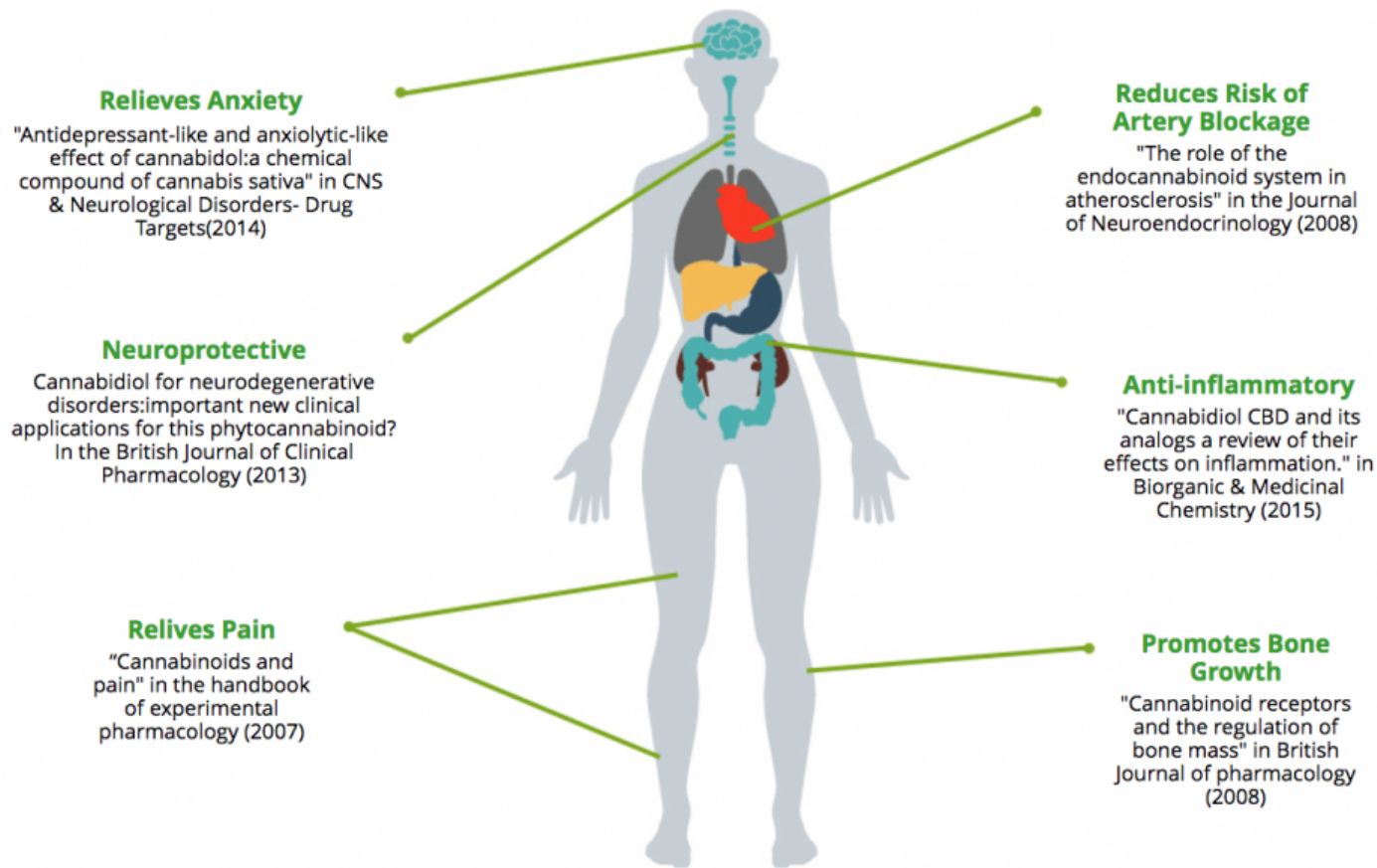
Part of the neuron that is activated by neurotransmitters, they allow messages to be passed from one neuron to another

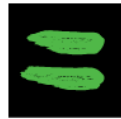
Postsynaptic

The neuron that receives messages, when its receptor is activated by neurotransmitter chemicals



HOW CBD WORKS IN THE HUMAN BODY





**WORLD
ANTI-DOPING
AGENCY**
play true

CANNABINOID

1. WHAT IS A CANNABINOID?

A cannabinoid is a compound produced by the cannabis (marijuana) plant or synthesized as a chemical (synthetic cannabinoid). Of more than 100 cannabinoids in the plant, delta-9-tetrahydrocannabinol (THC) is the main psychoactive compound, which alters the mind or behavior. Other cannabinoids include cannabidiol (CBD), cannabinol (CBN), and cannabigerol (CBG). Since the mid-2000's, many different synthetic cannabinoids were produced in illegal laboratories and sold as drugs to mimic the effects of THC.

2. WHICH CANNABINOIDS ARE PROHIBITED?

All natural and synthetic cannabinoids are prohibited except for cannabidiol (CBD). Cannabis, hashish and marijuana are prohibited. Products, including foods and drinks, containing cannabinoids, are also prohibited. All synthetic cannabinoids that mimic the effects of THC are prohibited.

3. IS CANNABIDIOL (CBD) OIL PROHIBITED?

CBD is not prohibited; however, athletes should be aware that some CBD oils and tinctures extracted from cannabis plants, may also contain THC and other cannabinoids that could result in a positive test for a prohibited cannabinoid.



Sport Supplements Market

WORLD SPORTS NUTRITION MARKET

Opportunities and Forecasts, 2014-2022



World Sports Nutrition Market is expected to reach **\$44.0 billion** by 2022.

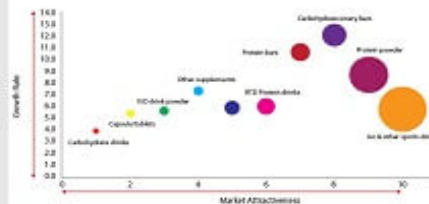
Growing at a **CAGR of 7.8%** (2016-2022)

World Sports Nutrition Market, By Product Type

- Protein powder
- Iso drink powder
- Capsule/tablets (creatine, BCAA etc.)
- Supplement powder
- RTD protein drinks
- Iso & other sports drinks
- Carbohydrate drinks
- Protein bars
- Carbohydrate/energy bars
- Other supplements

Iso & other sports drinks segment generated highest revenue in 2015 and is expected to be the largest market through 2021 as well

World Sports Nutrition Market Top Investment Pockets



World Sports Nutrition Market, By Distribution Channel

- Large retail & mass merchandisers
- Small retail
- Drug & specialty stores
- Fitness institutions
- Online & others

Large retail and mass merchandisers accounted for the highest sales in 2015 and is expected to dominate the market throughout the forecast period

World Sports Nutrition Market, By End User

- Athletes
- Bodybuilders
- Recreational users
- Lifestyle users

Athletes generated the largest revenue in 2015 and is expected to maintain its lead throughout the forecast period

World Sports Nutrition Market, By Geography

- North America
- Europe
- Asia-Pacific
- LAMEA

North America was the highest revenue generating region and is expected to maintain its lead through 2021





Protein Powder



Protein Bars



Carbo Hydrate Drinks



BCAA Creatine



Carbo Hydrate Energy Bars



Iso Drinks



RTD Protein Drinks



Supplement powder



Other Supplements

The sport supplement players

The Coca-Cola Company

Abbott Nutrition Inc.

PepsiCo Inc.

CFO (October 4th, 2019) Don't expect cannabis-infused drinks to join PepsiCo's (PEP) stable of beverage brands just yet.

Glanbia Plc.

Reckitt Benckiser Group Plc.

Yakult Honsha Co. Ltd.

Post Holdings Inc.

GNC Holdings

Clif Bar & Company

Otsuka Pharmaceutical Co. Ltd.

Atlantic Multipower UK Limited

GlaxoSmithKline PLC

Olimp Laboratories

Ultimate Nutrition Inc.

PowerBar Europe GmbH

Life Aid



Life Aid



So what is behind the appearance of the ever-expanding range of sports / protein nutrition?



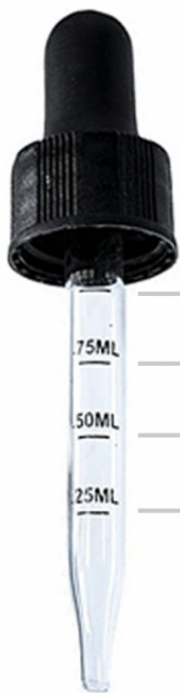
- An "extreme" group of athletes working out in gyms were the pioneers for the supplements' popularity.
- Only a handful of specialist shops sold the powder and new customers were often found by targeting their personal trainers.
- The bodybuilders were followed by professional athletes, then amateur and college athletes.
- As more people take an interest in their wellbeing - exercising more and eating more healthily - demand for protein rich products has continued to grow.

Athlete's routine

Table 1. Summary of practical guidelines for recommended doses, timing and intake duration of sports supplements.

Supplements	Recommendation doses	Timing	Intake duration
β-alanine	3-6 g	Ingestion of β-alanine with a meal containing carbohydrate and protein	4-10 weeks
Beetroot juice (nitrate)	~ 5-9 mmol	2-2.5 h prior to exercise	1-28 days
Caffeine	~ 3-6 mg / (kg bw)	60-90 min prior to exercise	Na
Creatine	20-25 g (loading dose)	Post-exercise creatine ingestion with beverages containing carbohydrate and protein	5-7 days
	3-5 g (maintenance dose)		4-12 weeks
Sodium bicarbonate	300-500 mg / (kg bw)	60-180 min prior to exercise	1-3 days
Carbohydrate	300-400 g carbohydrate rich meal	3-4 hr prior to exercise	Na
	Carbohydrate mouth rinsing	During exercise lasting less than 60 min	Na
	30-60 g/h glucose or maltodextrin with 6-8% carbohydrate concentration	During exercise lasting 1-2 hr	Na
	90 g/h glucose or maltodextrin + fructose (2:1) with 8-10% carbohydrate solution	During exercise lasting more than 2.5 h	Na
	1.2 g / (kg bw) or 0.8 g / (kg bw) carbohydrate + 0.4 g / (kg bw) protein	After exercise	Na
Protein	20-25 g for young athletes	After exercise	Na
	40 g for elderly athletes		
	~0.25-0.30 g / kg each meal for young person ~0.40 g / kg each meal for older person	Meal frequency	Na

Start with a small dosage of CBD and increase slowly until you reach your desired effect. Your ideal dosage of CBD depends on a lot of factors, like your body weight, body chemistry, the condition you're treating, and the concentration of CBD in the product you're using.



Mg CBD Per Bottle	300mg	600mg	900mg	1200mg	1800mg
Bottle Size	15ml	15ml	15ml	30ml	30ml
30 Day Supply in Bottle	10mg Daily	20mg Daily	30mg Daily	40mg Daily	60mg Daily
1ml dose	20mg (40 drops)	40mg (40 drops)	60mg (40 drops)	40mg (40 drops)	60mg (40 drops)
.75ml dose	15mg (30 drops)	30mg (30 drops)	45mg (30 drops)	30mg (30 drops)	45mg (30 drops)
.5ml dose	10mg (20 drops)	20mg (20 drops)	30mg (20 drops)	20mg (20 drops)	30mg (20 drops)
.25ml dose	5mg (10 drops)	10mg (10 drops)	15mg (10 drops)	10mg (10 drops)	15mg (10 drops)
2 Drops	1mg	2mg	3mg	2mg	3mg
1 Drop	.5mg	1mg	1.5mg	1mg	1.5mg

Important

- CBD is not a substitute for disease-modifying treatment for inflammatory arthritis or any other disease.
- Patients who are interested in trying CBD should first talk to the health care provider who treats their arthritis/disease before trying CBD. Together, they can review what has worked or not worked in the past, whether there are other options to try first, how to do a trial run, what to watch for and when to return for a follow-up visit to evaluate the results. Keep a symptom and dose diary to track effects.
- Quality CBD products can be expensive, especially when used for prolonged periods. To avoid wasting money, be completely sure that the product is truly having a positive effect on symptoms.

Source: Arthritis Foundation 2019



Important

- Choose products made by companies that follow good manufacturing practices established by the FDA for pharmaceuticals or dietary supplements (a voluntary quality standard because CBD products are not federally regulated under either category) or required by the state where they are manufactured.
- Buy from companies that test each batch and provide a certificate of analysis from an independent lab that uses validated, standardized testing methods approved by the American Herbal Pharmacopoeia (AHP), the U.S. Pharmacopoeia (USP) or the Association of Official Agricultural Chemists (AOAC).
- Avoid companies that claim their products have disease benefits.
- Be aware that marketeers and people behind retail counters are not health professionals; they are salespeople. That's why your doctor is your best source for guidance and monitoring when using an unregulated product.



www.cbdsports.nl

