NEW ROOTS HERBAL

NATURAL HEALTH PRODUCTS
WWW.NEWROOTSHERBAL.EU

» FUNCTIONAL FOOD

FERMENTED FOOD, FATTY ACIDS, MULTI-NUTRIENTS...



- Exclusive information for health-care professionals-

THE REVOLUTION IS IN FERMENTATION

DISCOVER WHAT FERMENTATION CAN DO TO IMPROVE YOUR NUTRITION

GENERAL BENEFITS OF FERMENTED FOOD

WATER-SOLUBLE FORMS AND ACIDIFICATION
IMPROVED DIGESTION
INCREASED ABSORPTION

BIOACTIVE FORMS
DO NOT REQUIRE METABOLISATION

PROBIOTIC EFFECT
IMPROVES FLORA AND DIGESTIBILITY

FERMENTATION PROCESS NEW ROOTS HERBAL



FERMENTATION MEDIUM
Saccharomyces boulardii
Lactobacillus plantarum
Water
Cane molasses

WHY ARE THEY SUPERFOODS?

NUTRITIONAL PROFILE
Rebalances **by reducing its sugar content** while its protein and polyunsaturated fatty acid profile increases. Nutrients and antioxidants are created and multiplied, becoming **highly bioavailable**.

PROBIOTIC EFFECT
Its digestibility is strengthened by the **probiotic effect** which also improves the intestinal flora, provides vitamins and supports the **immune system**.

BETTER TASTE
Fermented foods are not only preserved for long periods of time, but they also acquire unique and enhanced **organoleptic and nutritional properties**.

BETTER DIGESTION
In addition, fermentation tends to **acidify food**, improving the digestive pH and making minerals more easily absorbed.

REDUCES PATHOGENS AND ANTI-NUTRIENTS
Eliminates pathogenic organisms through bacteriocins or lactic acid that is generated in the process and inhibits anti-nutritional or potentially harmful substances.

FERMENTED

- » HIGHLY BIOAVAILABLE PHYTONUTRIENTS.
- » IMPROVES THE NUTRITIONAL VALUE OF YOUR SMOOTHIES, SOUPS AND CULINARY CREATIONS.
- » ORGANIC AND NATURALLY FERMENTED PRODUCTS FOR SUPERIOR BIOAVAILABILITY.
- » A SURPRISING TASTE!

HIGHLY BIOAVAILABLE PHYTONUTRIENTS THAT ARE EASY TO INCORPORATE INTO THE DIET

INCORPORATING THEM INTO YOUR SMOOTHIES, SOUPS AND CULINARY CREATIONS IMPROVES THEIR NUTRITIONAL VALUE

» To improve sports recovery add Fermented Turmeric to your smoothie, or at dinner to creams and soups as a post-workout supplement.

» Improve your digestion and intestinal health... by adding Fermented Ginger to infusions or smoothies.

» Give yourself a boost of energy... by adding Fermented Red Beet and /or Fermented Maca to your breakfasts as a complement to porridge, juices or herbal teas.

And many more possibilities...





References:

1. Langner, E., S. Greifenberg, and J. Gruenwald. "Ginger: history and use." Advances in therapy 15.1 (1998): 25-44.

2. Huh, Eugene, et al. "Ginger fermented with *Schizosaccharomyces pombe* alleviates memory impairment via protecting hippocampal neuronal cells in amyloid beta 1–42 plaque injected mice." Food & function 9.1 (2018): 171-178.

3. Choi, Ji Won, et al. "Neuroprotective effect of 6-paradol enriched ginger extract by fermentation using *Schizosaccharomyces pombe*." Journal of functional foods 31 (2017): 304-310.

4. Nile, Shivraj Hariram, and Se Won Park. "Chromatographic analysis, antioxidant, anti-inflammatory, and xanthine oxidase inhibitory activities of ginger extracts and its reference compounds." Industrial Crops and Products 70 (2015): 238-244.

5. Abdulrazak, A., et al. "Effects of clove and fermented ginger on blood glucose, leptin, insulin and insulin receptor levels in high fat diet-induced type 2 diabetic rabbits." Nigerian Journal of Physiological Sciences 33.1 (2018): 89-93.

6. Incharoen, T., and K. Yamauchi. "Production performance, egg quality and intestinal histology in laying hens fed dietary dried fermented ginger." International Journal of Poultry Science 8.11 (2009): 1078-1085.

7. Incharoen, T., K. Yamauchi, and N. Thongwittaya. "Intestinal villus histological alterations in broilers fed dietary dried fermented ginger." Journal of animal physiology and animal nutrition 94.5 (2010): e130-e137.

8. Pianpumepong, Plangpin, et al. "Study on enhanced absorption of phenolic compounds of *L actobacillus* fermented turmeric (*Curcuma longa* Linn.) beverages in rats." International Journal of Food Science & Technology 47.11 (2012): 2380-2387.

9. Metzler, Manfred, et al. "Curcumin uptake and metabolism." Biofactors 39.1 (2013): 14-20.

10. Rezvanirad, Azam, et al. "*Curcuma longa*: A review of therapeutic effects in traditional and modern medical references." Journal of Chemical and Pharmaceutical Sciences 9.4 (2016): 3438-3448.

11. Kim, Sang-Wook, et al. "The effectiveness of fermented turmeric powder in subjects with elevated alanine transaminase levels: a randomised controlled study." BMC complementary and alternative medicine 13.1 (2013): 58.

12. Kim, Seong-Beom, et al. "Antiinflammatory and antiallergic activity of fermented turmeric by *Lactobacillus johnsonii* IDCC 9203." Microbiology and Biotechnology Letters 39.3 (2011): 266-273.

13. Jeong, H. Kang, et al. "Antioxidant and Antimicrobial Effects of Fermented Tumeric (*Curcuma longa* L.)." Planta Medica International Open 4.S 01 (2017): Tu-PO.

14. Alvarado, Alvarado, and Jesenia Ludy. "La maca roja (*Lepidium meyenii*) y su acción en el tratamiento de la hiperplasia prostática benigna." (2015).

15. Shin, Sun-Hee, et al. "Gelatinized and fermented powders of *Lepidium meyenii* (Maca) improve physical stamina and epididymal sperm counts in male mice." KJET 23.4 (2008): 283-289.

16. Rosales-Hartshorn, M. "Maca: botanical medicine from the Andes." Adv Food Tech Nutr Sci Open J 1 (2015): e1-6.

17. Koubaier, Hayet Ben Haj, et al. "Effect of *Saccharomyces cerevisiae* fermentation on the colorants of heated red beetroot extracts." African Journal of Biotechnology 12.7 (2013).

18. Murphy, Margaret, et al. "Whole beetroot consumption acutely improves running performance." Journal of the Academy of Nutrition and Dietetics 112.4 (2012): 548-552.

19. Bailey, Stephen J., et al. "Dietary nitrate supplementation reduces the O2 cost of low-intensity exercise and enhances tolerance to high-intensity exercise in humans." Journal of applied physiology (2009).

20. Bescós, Raúl, et al. "Acute administration of inorganic nitrate reduces VO (2peak) in endurance athletes." Med Sci Sports Exerc 43.10 (2011): 1979-86.

21. Vanhatalo, Anni, et al. "Acute and chronic effects of dietary nitrate supplementation on blood pressure and the physiological responses to moderate-intensity and incremental exercise." American Journal of Physiology-Heart and Circulatory Physiology (2010).

22. Asgary, Sedigheh, et al. "Improvement of hypertension, endothelial function and systemic inflammation following short-term supplementation with red beet (*Beta vulgaris* L.) juice: a randomized crossover pilot study." Journal of human hypertension 30.10 (2016): 627.

23. Kapadia, Govind J., and G. Subba Rao. "Anticancer effects of red beet pigments." Red Beet Biotechnology. Springer, Boston, MA, 2013. 125-154.

FERMENTACTIVE FAMILY



PRODUCT DATASHEET

FermentActive Turmeric

Benefits of fermentation

Increases the content of bioactive and water-soluble curcuminoids such as tetrahydrocoumarin, increasing their bioavailability and antioxidant activity[8]. Curcumin in its natural form requires a long metabolic process to be converted into its bioavailable forms[9].

Traditional use

Turmeric has been used for centuries in traditional medicine as a **remedy for multiple medical conditions**[10].

Recommended daily dose

1 teaspoon (3 g) per day.

Nutritional information

	Per serving 3 g	Per 100 g
Energy (kJ/kcal)	46/11	1 548/370
Fat	0,1 g	3,5 g
Saturates	0,0 g	0,5 g
Carbohydrate	1,8 g	59,0 g
Sugars	0,0 g	1,0 g
Fibre	0,5 g	18,0 g
Protein	0,2 g	7,0 g
Salt	0,0 g	0,15 g

Format: 150 g (Code FE2281)

Health applications

It improves liver function[11] , has anti-inflammatory and anti-allergic properties[12] as well as antimicrobial activity[13].



PRODUCT DATASHEET

FermentActive Ginger

Benefits of fermentation

6-shogaol is transformed into the bioactive form 6-paradol, mimicking **natural fermentation in the intestine**.

Traditional use

It is the basis of Ginger Ale, a drink of English origin that is used as a home remedy for **preventing or relieving motion sickness, upset stomach and even sore throat**; some women use it to combat nausea during pregnancy[1].

Recommended daily dose

1 teaspoon (3 g) per day.

Nutritional information

	Per serving 3 g	Per 100 g
Energy (kJ/kcal)	46/11	1 548/370
Fat	0,1 g	1,5 g
Saturates	0,0 g	0,0 g
Carbohydrate	2,4 g	80,0 g
Sugars	0,0 g	1,0 g
Fibre	0,0 g	0,0 g
Protein	0,2 g	8,0 g
Salt	0,0 g	0,1 g

Format: 150 g (Code FE2279)

Health applications

Neuroprotective[2-3], antioxidant[4], anti-inflammatory[4], anti-diabetic[5] properties. It is also able to improve intestinal villi by improving nutrient absorption and gastrointestinal problems[6-7].





- HIGHLY BIOAVAILABLE PHYTONUTRIENTS, IN BIOACTIVE FORMS.
- WITH PROBIOTIC EFFECT, FERMENTED WITH *S. BOULARDII* AND *L. PLANTARUM*.
- ORGANIC AND NATURALLY FERMENTED PRODUCTS FOR SUPERIOR BIOAVAILABILITY.
- IMPROVE THE NUTRITIONAL VALUE OF YOUR FOOD. A SURPRISING TASTE!



PRODUCT DATASHEET

FermentActive Maca

Benefits of fermentation

Increases nutritional value by increasing the bioavailability of nutrients, with a **high iron content**.

Traditional use

In the **Andes** fermented maca has traditionally been consumed as a beer-like beverage known as "chicha de maca"[14].

Recommended daily dose

1 teaspoon (3 g) per day.

Nutritional information

	Per serving 3 g	Per 100 g
Energy (kJ/kcal)	46/11	1 548/370
Fat	0,1 g	3,5 g
Saturates	0,0 g	0,0 g
Carbohydrate	2,1 g	70,0 g
Sugars	0,0 g	1,0 g
Fibre	0,0 g	0,0 g
Protein	0,4 g	14,0 g
Salt	0,0 g	0,1 g
Iron	2,2 mg (16%*)	72 mg (514%*)

*NRV: Nutrient Reference Value in %.

Format: 150 g (Code FE2318)

Health applications

It improves physical endurance by minimising muscle and liver damage, and improves male reproductive function by increasing sperm count[15]. It can also help in menopause, osteoporosis and anaemia[16].



PRODUCT DATASHEET

FermentActive Red Beet

Benefits of fermentation

The natural fermentation process of red beet significantly reduces its sugar content and **increases the bioavailability of other nutrients**[17].

Traditional use

A fermented drink called Kvass, **used for centuries** as a general tonic, has been consumed traditionally in Eastern Europe.

Recommended daily dose

1 teaspoon (3 g) per day.

Nutritional information

	Per serving 3 g	Per 100 g
Energy (kJ/kcal)	46/11	1 506/360
Fat	0,1 g	4,5 g
Saturates	0,0 g	0,5 g
Carbohydrate	0,7 g	24,0 g
Sugars	0,7 g	23,0 g
Fibre	1,0 g	30,0 g
Protein	0,5 g	16,0 g
Salt	0,1 g	3,2 g

Contains only naturally occurring sugars.

Format: 150 g (Code FE2340)

Health applications

It contains nitrates that improve endurance during physical exercise[18-21], reduce blood pressure and systemic inflammation[22]. There is currently a great interest in the anti-cancer effect of betalains due to their antioxidant properties[23].





FATTY ACIDS

Coconut MCT Powder - With Acacia Gum.

Our Coconut MCT Powder is sourced exclusively from organically grown coconuts, a natural source rich in medium chain triglycerides (MCTs).

Formulated with organic acacia, a source of soluble fibre, Coconut MCT Powder is a versatile source of ketogenic fats for your ctive, healthy lifestyle.

In powder form, it is an easily metabolised alternative fuel for the brain and body which does not promote fat storage. Its smooth texture and neutral flavour combine well to energise hot or cold drinks, vinaigrettes, baked products and innovative, healthy cooking.

It is an excellent way to increase the energy content of your nutritional intake with useful, healthy calories.



Format: 150 g (Code FE2449)

PRODUCT DATASHEET

Nutritional information

	Per serving 5 g	Per 100 g
Energy (kJ/kcal)	142/34	2 807/671
Fat	3,5 g	70,0 g
Saturates	3,5 g	70,0 g
Carbohydrate	0,0 g	0,0 g
Sugars	0,0 g	0,0 g
Fibre	1,3 g	25,5 g
Protein	0,0 g	0,8 g
Salt	0,0 g	0,08 g
MCT	3,5 g	70,0 g

Recommended daily dose

1 teaspoon (5 g) per day dissolved in liquid or with food.



» 70% MEDIUM CHAIN TRIGLYCERIDES (MCT): 50% CAPRYLIC ACID (C8) AND 35% CAPRIC ACID (C10).

» 30% ACACIA GUM.

The highlights

- Easy to digest and metabolise.
- With acacia gum, a source of fibre.
- Smooth and pleasant texture, tasteless.

MEDIUM CHAIN TRIGLYCERIDE (MCT) POWDER.

KETOGENIC FATTY ACIDS THAT ARE RAPIDLY METABOLISED TO SUPPLY ENERGY FOR THE BODY AND BRAIN.

ORGANICALLY GROWN COCONUT OIL.

WITH ACACIA, A SOURCE OF SOLUBLE FIBRE, WHICH GIVES THE PRODUCT A SOFT AND PLEASANT TEXTURE.

INDICATIONS AND USES

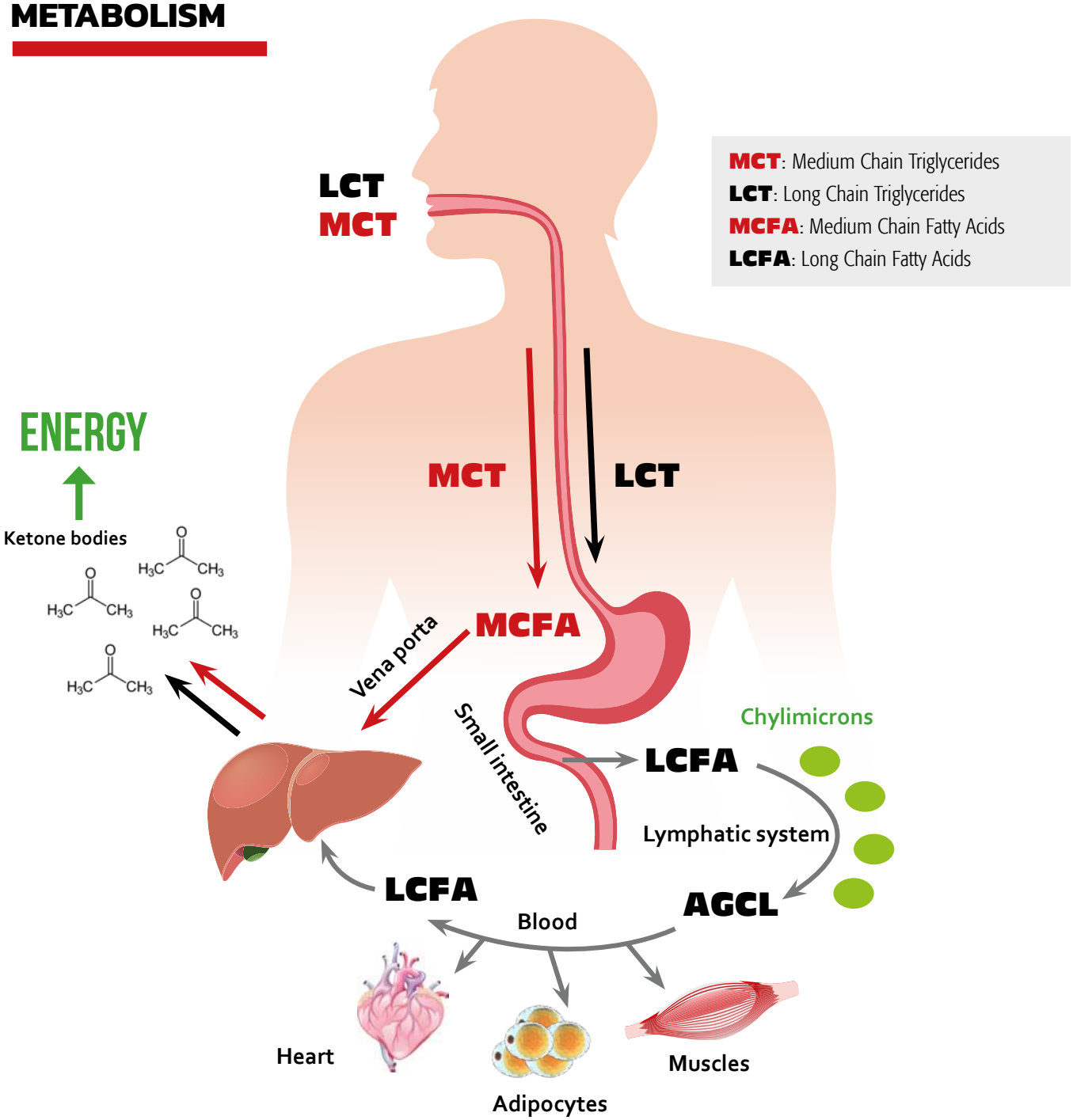
- Aids in weight loss diets.
- Ideal supplement for ketogenic diets.
- Suitable energy source for endurance athletes.
- Supports people with compromised appetite, intestinal malabsorption (biliary cirrhosis, pancreatic insufficiency, short bowel syndrome, celiac disease or chronic liver disease).
- Improves cognitive function (Alzheimer's disease).

DID YOU KNOW?



Acacia gum or Arabic gum is a soluble dietary fibre obtained from the resin or exudate of the stems and branches of *Acacia senegal*. It is mainly made up of complex polysaccharides (95%) consisting of highly branched galactan polymers. While 80% of the current production is used by the food industry for various applications (emulsification, encapsulation, coating, gum candies, etc.), acacia gum has traditionally been consumed by African and Indian populations to improve digestive comfort and intestinal transit. Its fermentation is slow and favours bifidobacterium growth. Acacia gum is therefore a soluble dietary fibre with prebiotic properties without bothersome intestinal side effects.

MEDIUM CHAIN TRIGLYCERIDE METABOLISM



References:

1. Binnert, C., et al. "Influence of human obesity on the metabolic fate of dietary long- and medium-chain triacylglycerols." The American journal of clinical nutrition 67.4 (1998): 595-601.
2. Krotkiewski, M. "Value of VLCD supplementation with medium chain triglycerides." International Journal of Obesity 25.9 (2001): 1393-1400.
3. Wang, Ying, et al. "Medium chain triglycerides enhances exercise endurance through the increased mitochondrial biogenesis and metabolism." PloS one 13.2 (2018): e0191182.
4. Kehayoglou, K., P. Kostamis, and B. Malamos. "The effect of medium-chain triglyceride on 47calcium absorption in patients with primary biliary cirrhosis." Gut 14.8 (1973): 653-656.
5. Harrison, Joan E., et al. "Effect of medium chain triglyceride on fecal calcium losses in pancreatic insufficiency." Clinical biochemistry 6 (1973): 136-140.
6. Tandon, Rakesh K., John B. Rodgers, and John A. Balint. "The effects of medium-chain triglycerides in the short bowel syndrome." The American journal of digestive diseases 17.3 (1972): 233-238.
7. Bavdekar, Ashish, Sheila Bhave, and Anand Pandit. "Nutrition management in chronic liver disease." The Indian Journal of Pediatrics 69.5 (2002): 427-431.
8. Łos-Rycharska, Ewa, Zuzanna Kieraszewicz, and Mieczysława Czerwionka-Szaflarska. "Medium chain triglycerides (MCT) formulas in paediatric and allergological practice." Przeglad gastroenterologiczny 11.4 (2016): 226.
9. Avgerinos, Konstantinos I., et al. "Medium chain triglycerides induce mild ketosis and may improve cognition in Alzheimer's disease. A systematic review and meta-analysis of human studies." Ageing Research Reviews 58 (2020): 101001.
10. Reger, Mark A., et al. "Effects of -hydroxybutyrate on cognition in memory-impaired adults." Neurobiology of aging 25.3 (2004): 311-314.
11. Henderson, Samuel T., et al. "Study of the ketogenic agent AC-1202 in mild to moderate Alzheimer's disease: a randomized, double-blind, placebocontrolled, multicenter trial." Nutrition & metabolism 6.1 (2009): 31.
12. Abe, Sakiko, Osamu Ezaki, and Motohisa Suzuki. "Medium-chain triglycerides in combination with leucine and vitamin D benefit cognition in frail elderly adults: a randomized controlled trial." Journal of nutritional science and vitaminology 63.2 (2017): 133-140.
13. Cunnane SC, et al. Can Ketones Help Rescue Brain Fuel Supply in Later Life? Implications for Cognitive Health during Aging and the Treatment of Alzheimer's Disease. Front Mol Neurosci. (2016).

New Roots
HERBAL



ISO 17025

L-A-B ACCREDITED

NON GMO

GOOD MANUFACTURING PRACTICE GMP CERTIFIED

New Roots Herbal info@newrootsherbal.eu www.newrootsherbal.eu

June 2022