

NEW ROOTS

NATURAL HEALTH PRODUCTS
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HERBAL

FIBROMYALGIA / CHRONIC FATIGUE SYNDROME



- Exclusive information for health-care professionals -



WHAT IS FIBROMYALGIA?

- » Fibromyalgia syndrome (FMS) is characterised by **chronic generalised pain and extreme fatigue**.
- » The prevalence of fibromyalgia varies from 0.4-9.8% worldwide. Previously considered to be a disease of developed countries, it is interesting to note that the greatest presence of FMS was found in Tunisia and in countries such as Bangladesh and Pakistan, with reported prevalences of 3.6% and 2.1%, respectively ⁽¹⁾. In Europe, the prevalence has been estimated to be between 2.9-4.7% in the general population ⁽²⁾. In Spain the prevalence is 2.37% (4.2% in women and 0.2% in men) ⁽³⁾.
- » Associated symptoms:
 - » Pain and stiffness throughout the body
 - » Fatigue and tiredness
 - » Problems with thinking, memory and concentration (known as mental fog or "lapses")
 - » Depression and anxiety
 - » Headaches, including migraine
 - » Irritable bowel syndrome
 - » Numbness or tingling in hands and feet
 - » Pain in the face or jaw, including a condition known as temporomandibular joint disorder
 - » Sleeping problems

Risk factors currently to be considered include:

- » **Genetics:** there are several genes associated with the risk of fibromyalgia ⁽⁴⁾
- » Family environment ⁽⁵⁾
- » History of **physical or emotional trauma** ⁽⁶⁾
- » Factors such as alterations in the anatomy, function and chemistry of the **nervous system** ⁽⁷⁻¹¹⁾
- » **Concurrent diseases** such as: hereditary haemochromatosis ⁽¹²⁾, migraine ⁽¹³⁾, sleep disorders ⁽¹⁴⁾ or irritable bowel syndrome ⁽¹⁵⁾, with a negative influence exerted by anxiety, depression and stress ⁽¹⁶⁾.
- » Among the other associated conditions, the most relevant is **sleep impairment**. A study in 2008 found that generalised pain associated with sleep disturbances was resolved when **restful sleep** was achieved⁽¹⁷⁾.

SOME CONSIDERATIONS:

- » **Autoimmune-based** disease.
- » Stiffness and pain: **sensitivity of the central nervous system to pain** due to serotonin deficiency - nociceptive system-thyroid hormone disturbances (hypothyroidism).
- » **Fatigue** and **sleep disturbances**.
- » Mood state and concentration.



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WHAT IS CHRONIC FATIGUE SYNDROME?

Chronic fatigue syndrome (CFS) is a chronic condition that **can be difficult to diagnose and treat**. Depending on its severity, it can cause enormous damage to a person's quality of life. These problems are compounded by the fact that there is no cure or standard treatments to help with the symptoms.

It is a disorder in which the **extreme fatigue** cannot be explained by any medical condition. It may worsen with physical or mental activity, but does not usually improve with rest ^(1,2).

Associated symptoms:

- » Loss of memory or concentration
- » Unexplained muscle pain
- » Headache
- » Lack of sleep
- » Extreme exhaustion.

Although not yet proven, some possible causes include:

- » **Infections, especially viral infections** (Epstein-Barr virus). Some people develop CFS after a viral infection, sometimes even years later ⁽³⁾.
- » **Immune system deficiencies**. There may be an association between autoimmune diseases such as multiple chemical sensitivity (MCS) and CFS ⁽⁴⁾.
- » **Hormonal problems**. Hormones outside the normal range (thyroid, sex or stress hormones). It is difficult to say whether they are necessarily a contributing factor, because sometimes the disorder itself can lead to such problems ⁽⁵⁾.
- » **Nutritional deficiencies**. A lack of macronutrients, vitamins or minerals is sometimes associated with cases of CFS ⁽⁶⁾.

The symptoms of CFS must last 6 months or longer to establish a diagnosis. There appears to be a low prevalence in the general population: less than 0.1% ⁽⁷⁾. Some cases are misdiagnosed or take a long time in being diagnosed.

SOME CONSIDERATIONS:

- » **Differential diagnosis between CFS and FM**: fatigue in the former and musculoskeletal pain in the latter, though 80% of all patients with FM or MCS have CFS. Other chronic diseases (chronic inflammation, diabetes, heart disease, etc.), certain drug treatments (oral contraceptives, antihistamines, antihypertensive drugs, etc.), stress, depression, etc. ⁽⁸⁾.
- » **Examination**: painful lymphadenopathies (chronic infections), complete blood testing (ferritin), thyroid function, liver function parameters.

- » **Environmental disease**, liver disorder: exposure to toxins (food additives, pesticides, heavy metals, etc.) ⁽⁹⁾.
- » **Excessive intestinal permeability** and food allergies: 55-85% of all patients with CFS ^(10,11).
- » **Hypothyroidism, hypoglycaemia and hypoadrenalism** (CFS is characterised by decreased cortisol levels on waking and in late afternoon, low 24-hour urine free cortisol and increased basal ACTH ^(12,13)).



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FIBROMYALGIA

Useful GUIDE

fibromyalgia guide	Breakfast	Lunch	Dinner	Effects
Magnesium Bisglycinate Plus	2 capsules	-	2 capsules	Reduces pain, fatigue and depression
Co-Enzyme Q10 Slow Release	1 capsule	1 capsule	1 capsule	Aids in energy production
B Complex Ultra	1 capsule	-	-	Helps with stress, fatigue and tiredness
Reishi	1 capsule	-	-	Helps in fatigue, tiredness, anxiety and sleep
Omega Mood- EPA	1 softgel	-	1 softgel	Helps inflammation and improves mood state
Acidophilus Ultra	1 capsule	1 capsule	1 capsule	Intestinal flora balance and immune boosting
PEA	1 capsule	-	1 capsule	Helps relieve chronic pain, anti-inflammatory action

Other aids	Breakfast	Lunch	Dinner	Effects
D-Ribose +Magnesium	5 g	5 g	5 g	Reduces the symptoms of fibromyalgia
MCT from Coconut Powder	5 g	5 g	5 g	Increases energy. Rapid energy source
Vitamin D3	1 capsule/2 drops	-	-	Helps reduce pain
Resveratrol Max	1 capsule	-	-	Antioxidant

Other aids

CHRONIC PAIN (long duration)	Dose	Comments
Joint Tissu & M.S.M.	3-6 capsules / day	Specific joint pain
Joint Complex	2-6 capsules / day	Specific joint pain
Omega Mood- EPA	2-4 softgels / day	Reduces inflammation
Curcumin 95	4-6 capsules / day	Reduces inflammation
Aid -Inflam	2-10 capsules / day	Reduces inflammation
Magnesium Bisglycinate Plus	2-6 capsules / day	-
Zinc HVP Chelate	1-3 capsules / day	With food
Vitamin E 8	1-5 softgels / day	-

ACUTE PAIN (1-14 days)	Dose	Comments
Magnesium Bisglycinate Plus	1-2 capsules / hour	On demand
Curcumin 95	2-10 capsules / day	With food
Aid -Inflam	2-10 capsules / day	With food
Zinc HVP Chelate	1-10 capsules / day	With food
B-Complex Ultra	4 capsules / day	Specific low back pain

MOOD STATE	Dose	Effects
Omega Mood- EPA	4 softgels / day	Mood state and inflammation
Zen Plus	2-3 capsules / day	Physical and mental stress
Ashwagandha	1-2 capsules / day	Chronic stress and anxiety

INTESTINE	Dose	Effects
L-Glutamine (powder)	15 g / day	Intestinal permeability
Bone Broth Protein	10 g / day	Intestinal permeability
Ferment Activ Turmeric	3 g / day	Gastrointestinal disorders
Acidophilus Ultra	1-2 capsules / day	Intestinal flora

d i e t

Overweight is an important factor associated with increased severity of the symptoms

Eliminate or reduce in diet

- » Excitotoxins, flavour enhancers (monosodium glutamate and aspartame), present in processed foods, since they exert an excitatory effect upon neurotransmitters.
- » Foods containing gluten. By avoiding these foods for 6 months, many patients improve their intestinal symptoms, tiredness and pain.
- » Reduce animal protein intake, as it reduces the amount of tryptophan in the brain, which is already low in fibromyalgia patients.
- » Reduce the intake of arachidonic acid, which is a precursor of proinflammatory prostaglandins, present in foods such as red meat, egg yolk, dairy products, etc.



INCREASE IN DIET

- » Antioxidants.
- » Vegetables.
- » Fruits.
- » Nuts and sprouted seeds.
- » Foods rich in Omega-3.
- » Consider chlorella, as it has been shown to reduce pain and improve sleep quality and anxiety.

treatments

In relation to **CONVENTIONAL MEDICINE**, the main forms of treatment include:

- » Drugs such as antidepressants⁽²⁾, anticonvulsants⁽³⁾, opioid analgesics⁽⁴⁾ and muscle relaxants⁽⁵⁾.

- » Psychological interventions, such as cognitive behavioural therapy⁽¹⁾.

- » Lifestyle modifications such as stimulating activities⁽⁶⁾ and physical exercise⁽⁷⁾.

In relation to **NATURAL TREATMENTS**, the following food supplements, among others, are used:

Aimed at **energy production**: coenzyme Q10⁽⁸⁾, group B vitamins⁽⁹⁾, quercetin⁽¹⁰⁾ and L-carnitine⁽¹¹⁾.

Aimed at normalising **sleep patterns**: melatonin⁽¹²⁾, niacin (vitamin B3)⁽¹³⁾ and valerian⁽¹⁴⁾.

Aimed at modifying the **stress response** and promoting **muscle relaxation**: magnesium⁽¹⁵⁾, ashwagandha⁽¹⁶⁾ and rhodiola⁽¹⁷⁾.

Reishi (*Ganoderma lucidum*)⁽¹⁸⁾, D-ribose⁽¹⁹⁾, probiotics⁽²⁰⁾, omega-3⁽²¹⁾, chlorella⁽²²⁾, vitamin D3⁽²³⁾, 5-HTP⁽²⁴⁾, etc., also help to control the symptoms of fibromyalgia.

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CHRONIC FATIGUE SYNDROME

The close correlation between CFS, FM and MCS suggests the need for liver detoxification, food allergy control and a gut-normalising diet.

DIET:

- Identification and control of food allergies.
- Increase intake of water, organic food, blue fish (omega-3), etc.
- Avoid alcohol, caffeine, red meat, processed foods, etc.
- Hypoglycaemic control (eliminate sugar and refined starchy foods)

TREATMENTS:

In conventional medicine, there is no cure or specific treatments. There are some therapeutic options such as:

- Psychological interventions, such as cognitive behavioural therapy⁽¹⁾.
- Physiotherapy and physical exercise help to alleviate symptoms of fatigue and improve mood state⁽²⁾.

In relation to natural treatments, the following food supplements, among others, are used:

- Aimed at nutritional deficiency: complete multivitamin-mineral complex⁽³⁾.
- Aimed at energy production by the mitochondria: magnesium (CFS patients present cellular Mg deficiency)⁽⁴⁾, coenzyme Q10⁽⁵⁾, L-carnitine⁽⁶⁾, B-complex⁽⁷⁾, omega-3⁽⁸⁾, sterols & sterolins⁽⁹⁾.
- Reinforcement of the immune system: astragalus⁽¹⁰⁾, Siberian ginseng⁽¹¹⁾, *Panax ginseng*⁽¹²⁾, echinacea⁽¹³⁾.
- Helps in depression: omega-3⁽¹⁴⁾, hypericum⁽¹⁵⁾, ashwagandha⁽¹⁶⁾.
- Adrenal cortex disorders: corticomimetic agents such as liq-uorice⁽¹⁷⁾ and cortical modulators such as Siberian ginseng and sterols & sterolins⁽¹⁸⁾.
- Oxidative stress: (implicated in the pathogenesis, where mito-

chondrial dysfunction may be among the main causes, along with antioxidant enzyme system deficiency) vitamin C, E, glutathione, lipoic acid, NAC, oligomeric proanthocyanidins, ginkgo biloba⁽¹⁹⁾.

In addition to diet and supplements, other natural therapies have shown promise. An acupuncture protocol can be very helpful for many CFS patients. Acupuncture can help with some of the physical symptoms of CFS, such as muscle discomfort, but it can also help with the stress commonly seen in these patients⁽²⁰⁾. Hydrotherapy is another natural treatment that CFS patients report to offer benefits. In particular, constitutional hydrotherapy treatments that involve the patient lying down and being wrapped under a blanket with alternating hot and cold, have provided benefits for patients⁽²¹⁾.



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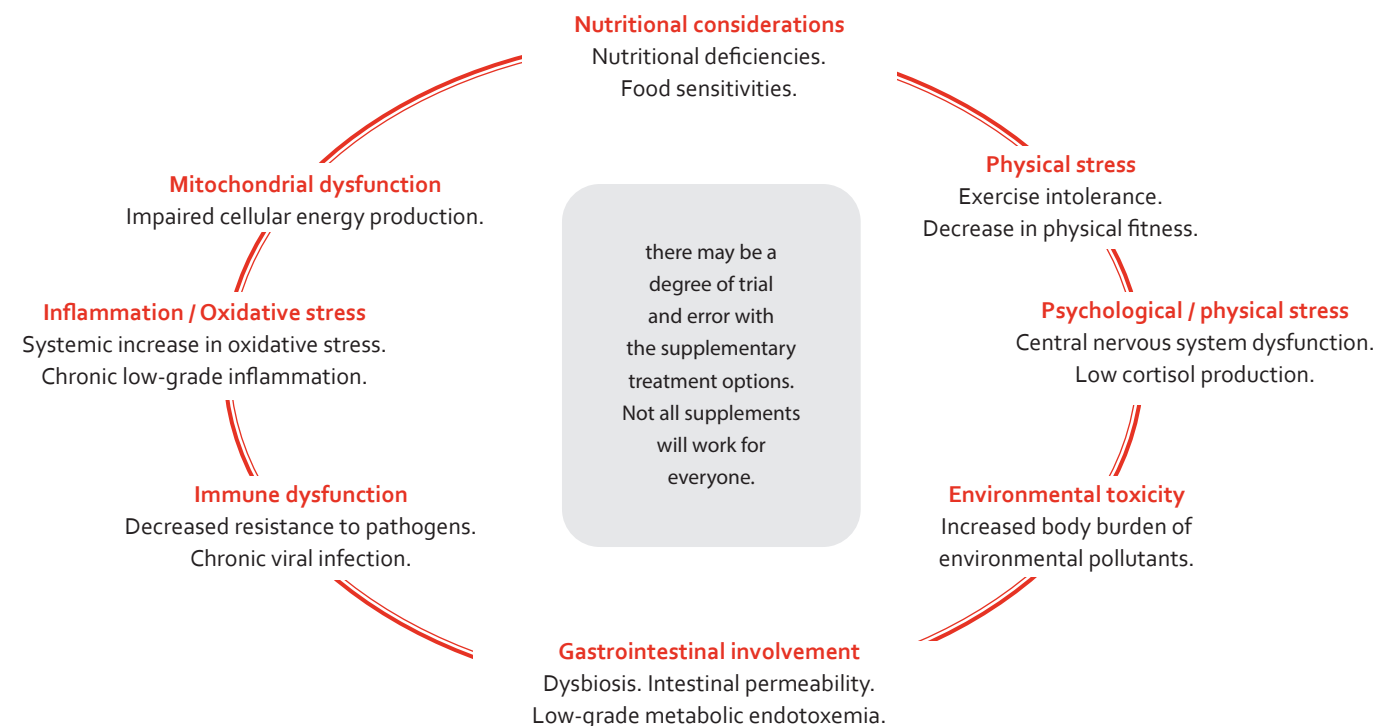
Useful GUIDE

chronic fatigue	Breakfast	Lunch	Dinner	Effects
MultiNutriMax	2 capsules			Multinutrient supply
Magnesium Bisglycinate Plus	2 capsules		2 capsules	Reduces pain, fatigue and depression
Co-EnzymeQ10 Slow Release	1 capsule	1 capsule	1 capsule	Aids in energy production
B-Complex Ultra	1 capsule			Helps with stress, fatigue and tiredness
OmegaMood-EPA	1 softgel		1 softgel	Helps inflammation and improves mood state
Reishi	1 capsule			Helps in fatigue, tiredness, anxiety and sleep
AcidophilusUltra	1 capsule	1 capsule	1 capsule	Intestinal flora balance and immune boosting

energy	Breakfast	Lunch	Dinner	Effects
D-Ribose+Magnesium	5 g	5 g	5 g	Increases energy and reduces fatigue
Energy	1-2 capsules			Increases energy
MCT from Coconut	5 g	5 g	5 g	Aumenta la energía. Fuente rápida de energía

INTESTINE / IMMUNE SYSTEM	Dose	Effects
AcidophilusUltra	1 capsule/3 times a day	Intestinal flora
PsylliumPlus (powder)	5 g/day	Intestinal function
L- Glutamine (powder)	2-10 g/day	Intestinal permeability
IMMX Immune	2 capsules/2 times a day	Immune boosting

MOOD STATE	Dose	Effects
OmegaMood-EPA	4 pearls/day	Mood state and inflammation
ZenPlus	2-3 capsules/day	Physical and mental stress
Ashwagandha	1-2 capsules/day	Chronic stress and anxiety



FIBROMYALGIA / CHRONIC FATIGUE SYNDROME



The content of this brochure is for informative purposes only and should not replace medical advice. A healthy, balanced diet, along with exercise, is essential for maintaining good health.