GUNA LABORATORI

NEW with steviol glycosides (STEVIA)

Ferroguna

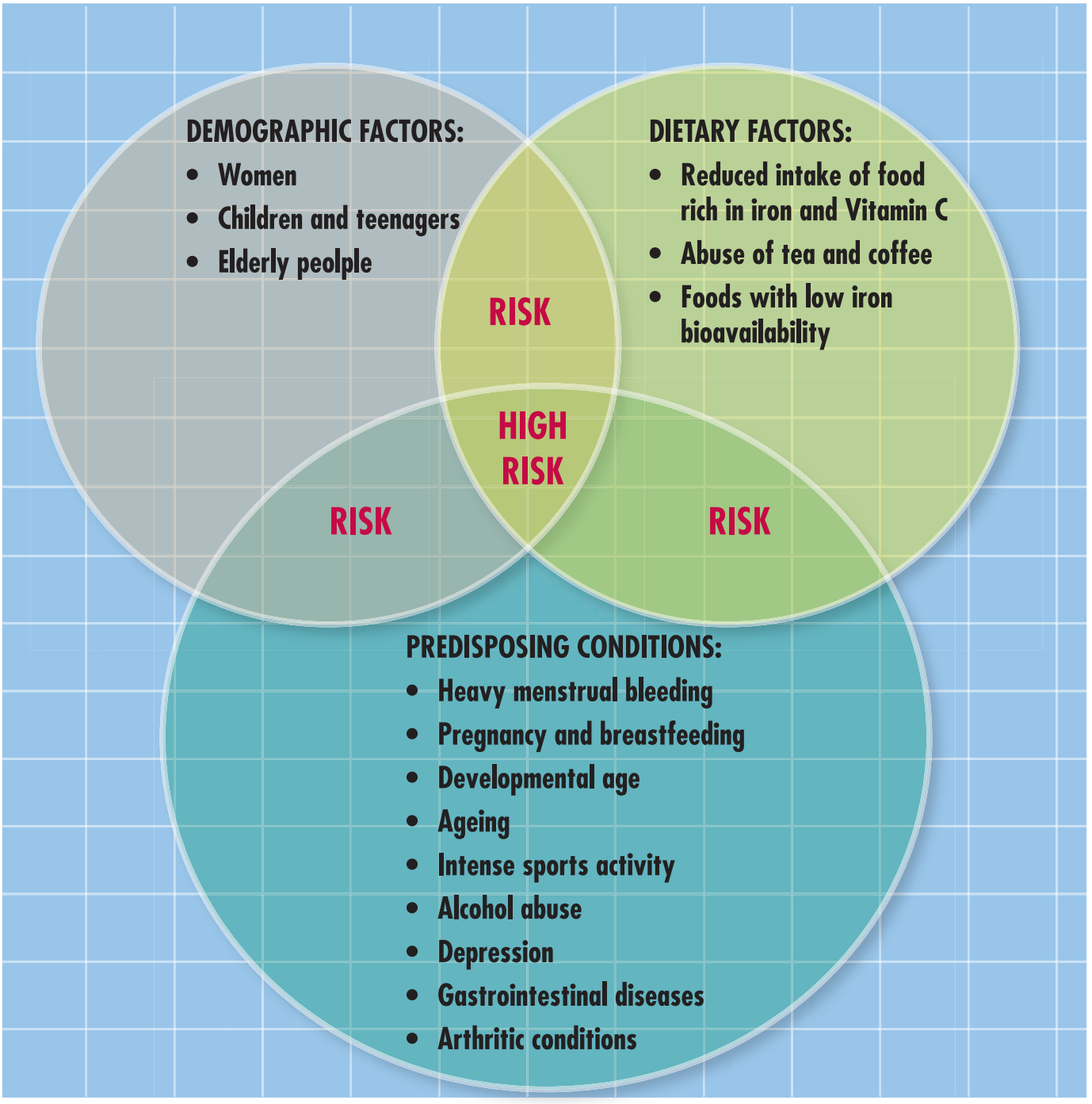
Balanced and optimal solution against iron deficiency

QUICK DISSOLVING WITHOUT WATER

GLUTEN FREE

WHY **Ferro**guna

Iron deficiency is the most common mineral deficiency in the human species. It mainly affects women, particularly **20 to 30% of fertile female population**.
Children, **teenagers** and **the elderly** are also at high risk of deficiency.



WHY **Ferro**guna

The daily Nutrient Reference Values (NRV) of iron should be taken in a highly absorbable form for the body **(ferrous form, Fe^{+}). Iron NRV can vary according to age and physiological conditions, ranging from 5 mg/day in early childhood up to 14 mg/day in adulthood, until reaching 27 mg/day during pregnancy**. [1-2]

Due the presence of one or more risk factors, as a result of increased loss or increased need, the **daily intake** and **absorption of iron** may be insufficient, creating **organic deficit** conditions which may result in:

- **ANEMIA**
- **SENSE OF EXHAUSTION**
- **CHRONIC FATIGUE**
- **REDUCED CONCENTRATION**
- **HEADACHE**
- **INSOMNIA**
- **PALE SKIN**
- **MUSCLE DISORDERS**
- **APPEARANCE OF SMALL ULCERS IN THE CORNERS OF THE MOUTH**
- **BURNING SENSATION IN THE TONGUE AND ALTERED TASTE**
- **FRAIL HAIR AND NAILS**

Ferroguna

Efficacy and tolerability of **Ferro**guna *versus* **iron sulfate** in the treatment of iron deficiency anemia in pregnancy: non-inferiority controlled clinical trial.

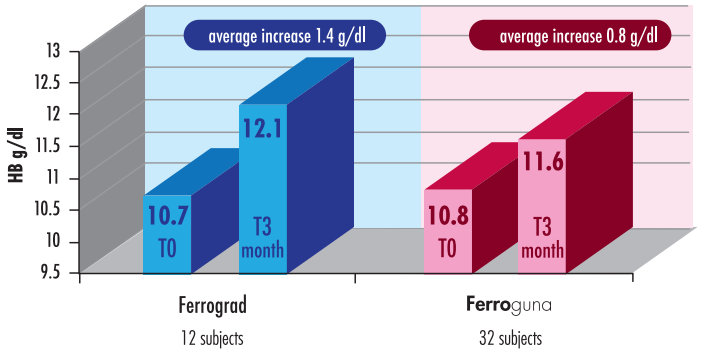
A. Roncuzzi[1], M. Cazzaniga[2], G. Pretolani[3], P. Tarantini[4], L. Luraschi[5], G. Tisi[6], R. Roncuzzi[7], L. Miliffi[8], R. Chionna[9], T. Benedetti[10], R. Pasin[11], R. Garbelli[12].

Giornale Italiano di Ostetricia e Ginecologia Vol. XXXIV – n. 6 (Italian Journal of Obstetrics and Gynecology) November-December 2012

This multicenter, open, randomized, controlled parallel-group clinical trial was conducted in Italy on 49 patients aged over 18 years, pregnant over week 12, enrolled according to well-defined criteria, treated for 12 consecutive weeks with 525 mg/day of iron sulfate heptahydrate (**Ferrograd**®) or with 2 sachets/day of **Ferro**guna and monitored with monthly evaluation of the hematochemical and biophysical parameters, in order to demonstrate the non- inferiority of **Ferro**guna compared to **Ferrograd**®.

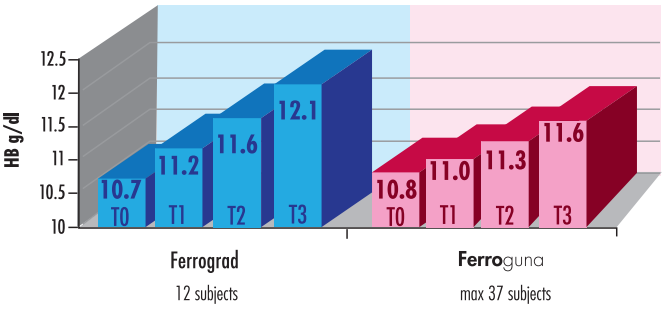
- Primary outcome:
  Increase of Hb (haemoglobin) in the blood of at least 0.5 g/dl during the treatment period T0-T3 months. Ferroguna **increases the concentration of Hb** in the blood in a clinically relevant manner, that is > 0.5 g/dl (average 0.8 g/dl after 3 months) and statistically significant manner (p-value < 0.05) in the period T0-T3 months:

AVERAGE HB AT SCREENING AND AT 3RD MONTH OF TREATMENT
In both groups the increase is clinically relevant (over 0.5 g/dl)



- Secondary outcome:
  1) Gradual Hb increase. Ferroguna leads to a **gradual increase** of the Hb values during the three months of treatment in a physiological manner:

AVERAGE HB AT SCREENING AND AT 1st, 2nd and 3rd MONTH OF TREATMENT



2) The opinion expressed by the subjects belonging to the group treated with **Ferro**guna about the overall perception of the product was very positive, with higher tolerability of **Ferro**guna compared to **Ferrograd**®, confirming the safety of the preparation.

Conclusions

This study shows the non-inferiority of the food supplement **Ferro**guna compared to the drug **Ferrograd**® in the treatment of iron deficiency anemia in pregnancy. The data also show a higher tolerability of **Ferro**guna and an increase of haematological values of ferritin and serum iron at the end of 3 months of treatment.

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Ferroguna

Innovative orodispersible food supplement

NUTRITION FACTS

	per 100 g	per sachet	%NRV* sachet
Energy	1155 kJ 276 kcal	20 kJ 5 kcal	
Fat of which saturates	0.23 g 0 g	0 g 0 g	
Carbohydrate of which sugars	80.78 g 13.84 g	1.37 g 0.24 g	
Protein	0.61 g	0.01 g	
Salt	0.02 g	0 g	
Iron	823.5 mg	14 mg	100
Copper	21.2 mg	0.36 mg	36
Vitamin C	1764.7 mg	30 mg	38
Baobab fruit pulp	38.2 g	650 mg	

**NRV: Nutrient Reference Values.*

- **Ferroguna promotes the production of haemoglobin and RED BLOOD CELLS FORMATION by providing 100% of the daily Iron needs** in highly absorbable form because:
  - it is conveyed in an organic complex (iron fumarate)
  - it is in **orodispersible** form, that is immediately bioavailable to the body
- The bioavailability of Iron is further improved by the presence of **Copper**, **Vitamin C** and **Baobab fruit pulp**. These do not only **improve iron absorption and its transport in the organism**, but at the same time provide elements with **antioxidant** and **protective properties**.
- **Ferroguna** is an optimal iron supplementation in **pregnancy**, being fully compatible with specific daily Nutrient Reference Values[1].
- **Ferroguna melts directly in the mouth without water** and is rapidly absorbed. Its high palatability and tolerability **do not induce any side effects in the gastrointestinal system**.

THE INGREDIENTS OF **Ferro**guna

IRON FUMARATE

1 sachet of **Ferro**guna contains average **14 mg of iron Fumarate in ionic ferrous form** with a bioavailability of 30-35%, the highest one compared to other sources (bioavailability of 5-20%): 1 sachet of **Ferro**guna releases in the blood about **5 mg of iron** available for absorption, thus meeting the average daily needs of the organism.[3-4]

VITAMIN C (Ascorbic Acid)

1 sachet of **Ferro**guna provides a well-balanced amount of Vitamin C necessary for iron absorption and utilization. This vitamin is essential for hematopoiesis: it promotes the incorporation of iron into haemoglobin and its transport through transferrin. Research studies confirm that **iron absorption increases by 30%** when it is associated to Vitamin C.[5]

COPPER

It is an important cofactor for several enzymes involved in iron metabolism.
Its presence is required along with Vitamin C for an optimal iron absorption.[6]

BAOBAB dried fruit pulp (organic certification, free from GMO and allergens)

With the innovative pharmaceutical technology used to produce **Ferro**guna, the properties of Baobab are fully preserved. Research studies show that a daily intake of Baobab fruit pulp:[7-8-9-10-11-12]

- **Increases haemoglobin concentration**
- **Improves the iron cellular store**

Controlled study on 300 children aged between 6 and 8 years.[10]

The high content of vitamins, minerals and trace elements of the Baobab fruit pulp helps **reducing anemia**, thus significantly increasing iron stores. In addition to this, Baobab fruit pulp has natural analgesic and anti-inflammatory properties[11], promotes good intestinal functionality and counteracts diarrhea.[12]

OPTIMAL SUPPORT IN CASES OF:

INCREASED IRON NEED

• Pregnancy	**Ferro**guna formulation is **fully compatible with Iron specific NRV** (Nutrient Reference Values). A **daily** intake of **1 or 2 sachets** is allowed, with no side effects.
• Post-partum period • Breastfeeding • Growth • Ageing • Sports activity	**1 sachet daily** meets daily iron needs.

REDUCED INTESTINAL ABSORPTION

• **Dietary deficiencies, intestinal disorders** that compromise iron absorption (especially celiac disease). • **Vegetarian** or **vegan diet**. • **Increased blood loss** due to heavy menstrual bleeding, or due to pathological conditions such as gastro-duodenal ulcer, gastro-intesintal disorders, etc.	**1 to 2 sachets** of orodispersible granules daily, according to medical advice.

How to use

Dissolve the content of one sachet directly in the mouth, without water.

Ferroguna **can be taken uninterruptedly for long periods.**

Ferroguna COMBINATIONS

Ferroguna
+
Gunamino Formula

Iron deficiency anemia with low haemoglobin levels

Ferroguna
+
Colostro Noni

Iron deficiency secondary to malabsorption syndromes

Ferroguna
+
Vit Formula

Iron deficiency anemia along with vitamin deficiency

Ferroguna
optimal supplementation against iron deficiency also in pregnancy

GLUTEN FREE

QUICK DISSOLVING WITHOUT WATER

High Iron bioavailability

Pleasant taste

Well-tolerated

INGREDIENTS

Sweetener: sorbitol (from corn); Baobab (*Adansonia digitata* L.) fruit pulp, ferrous fumarate, L-ascorbic acid (vitamin C), acidity regulator: citric acid; natural flavouring, stabiliser: gum arabic (acacia gum); anti-caking agent: silicon dioxide; sweetener: steviol glycosides; cupric citrate.

WARNINGS

Store the product in a cool and dry place and protect from light. The expiry date refers to a product correctly stored in its original and undamaged packaging. Do not exceed the stated recommended daily dose. Keep out of the reach of young children. Excessive consumption may produce laxative effects. Food supplements should not be used as a substitute for a varied diet and a healthy lifestyle.

PACKAGING

28 x 1.7 g sachets.

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