



L'affascinante storia del sangue

Roberto Raimondi

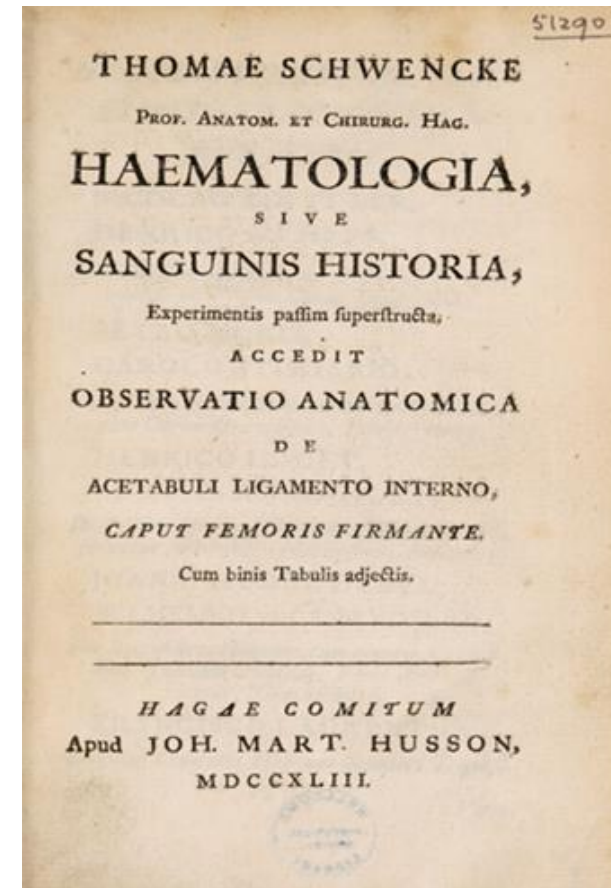
Vicenza



Wolfgang Amadeus Mozart
Galimathias musicum (KV32)



Thomas Schwencke
(1694-1767)



1743



Jean-Baptiste Denis



15 giugno 1667 - prima trasfusione a un essere umano

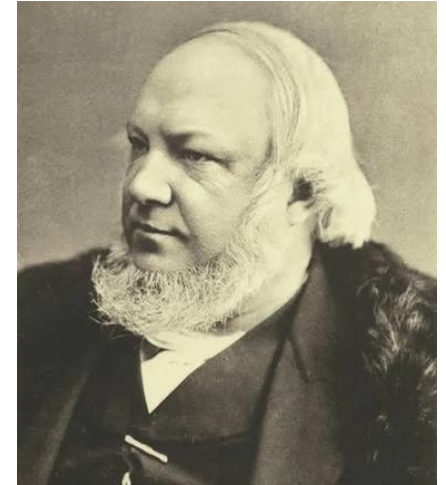
19 dicembre 1667 - Antoine Mauroy

1846-1848

Louis Saalmuller e Thomas Richardson pubblicano le prime tabelle con il contenuto di ferro degli spinaci.

1850

Jacob Moleschott, fisiologo olandese naturalizzato italiano molto influente (senatore del Regno d'Italia), presenta a un pubblico ampio le analisi sugli spinaci sostenendo che sono la verdura con il più alto contenuto di ferro.



1867

Iniziano a comparire indicazioni sull'elevato contenuto di ferro degli spinaci anche in libri di cucina, in alcuni testi scolastici e su diversi giornali.

1870

Jean-Baptiste Boussingault, chimico agronomo francese, riporta il contenuto di ferro riferito al peso a fresco.



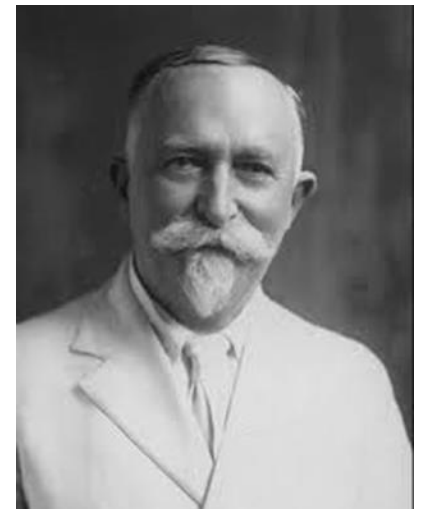
1870

Gustav von Bunge, fisiologo estone-svizzero, riporta il contenuto di ferro riferito al peso a secco.



1895

Appare sulla rivista *Modern Medicine and Bacteriological Review* un editoriale attribuibile all'editore John Harvey Kellogg, corrispondente di von Bunge e forte sostenitore dell'elevato contenuto di ferro negli spinaci.



Inizio Novecento
Ampie campagne pubblicitarie



The Vatican at Rome recommends Nuxated Iron

If you lack BODILY or MENTAL VIGOR; If you are WEAK; NERVOUS or IRRITABLE, TRY NUXATED IRON TODAY.

Nuxated Iron CONTAINS ORGANIC IRON LIKE THE IRON IN YOUR BLOOD AND LIKE THE IRON IN SPINACH, LENTILS AND APPLES.

NUXATED IRON also contains a remarkable product, brought to the attention of the French Academy of Medicine by the celebrated Dr. Robiquet, which represents the principal chemical constituent of active living nerve force FOR FEEDING THE NERVES, so that NUXATED IRON might be said to be both a BLOOD and a NERVE FOOD.

THERE ARE 30,000,000,000,000 RED BLOOD CORPUSCLES IN your blood and each one must have iron.

Today about one person out of every three is said to suffer more or less from the great devastating weakness brought on by malnutrition or lack of sufficient nourishment, which is caused NOT BY LACK OF FOOD but often by LACK OF SUFFICIENT ORGANIC IRON in the blood to enable us to GET THE STRENGTH OUT of our food.

IRON IS THE MASTER PRINCIPLE OF THE BLOOD AND LIFE. Our forefathers ate the husks of grains and the skins and peels of vegetables and fruits, rich in strength-giving organic iron, but modern methods of cooking throw all these things away—hence the alarming illness. In recent years, in Anæmia—iron starvation of the blood with all its attendant ills.

When, as a result of iron starvation, you get up feeling tired in the morning, when you find yourself nervous, irritable and easily upset, when you can no longer do your day's work without being all fagged out at night; when your digestion fails, your face grows pale, your hands across the back, shortness of breath, heart palpitation or your face becomes drawn, do not wait until you go all pale and collapse in a state of nervous prostration, or until in your weakened condition you contract some serious disease, but consult your family physician and have him take a specimen of your blood and make a "blood count." If your red blood corpuscles are low, test the iron-power of your blood yourself, by adding pills of spinach, carrots, or other iron-rich fruits and vegetables to your daily food and take organic iron—Nuxated Iron—for them for a while, until your blood's good condition improves. Thousands of people have surprisingly increased their strength, energy and endurance in two weeks by this simple experiment. It is not the iron you take in organic Nuxated iron and not metallic iron which people use for color and which is made of iron and action of strong acids on small pieces of iron—an entirely different iron from Nuxated iron. The fact that you may develop metallic iron without receiving any benefit does not mean that Nuxated Iron will not do it. Nuxated Iron represents organic iron in a highly concentrated form, so that its dose is estimated to be approximately equal to 100 parts of organic iron present in eating spinach.

Benedictus Pl. XV

WHAT THE VATICAN SAYS ABOUT NUXATED IRON

"I am happy to inform you that your gift of Nuxated Iron has been accepted with particular gratitude by the Holy Father, who, persuaded by its beneficial effects, and AFTER HAVING IT SPECIALLY ANALYZED BY THE DIRECTOR OF THE PHARMACY OF THE VATICAN, formulates the most sincere wishes that your product may become famous and be as appreciated by the public AS ITS VALUE CERTAINLY MERITS."

Benigno Zaccaria
F. Sforzini

(J. Tedeschini, Institute of the Secretary of State - Vatican)

"The composition of Nuxated Iron is such that the physiological and therapeutic effects cannot fail to be produced, as is usually the case in the prescription of pharmaceutical products of this kind."

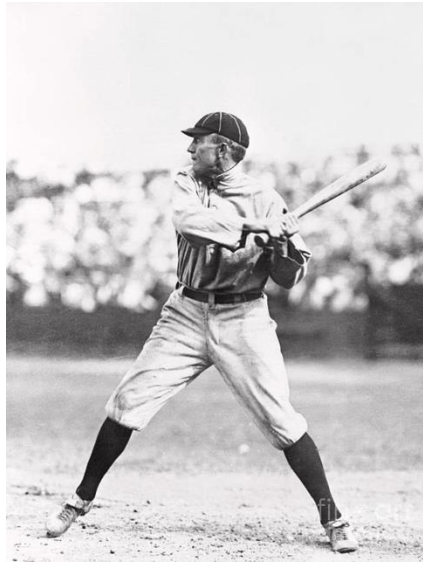
F. Nardoni, Director of the Pharmacy of the Vatican
F. Sforzini

half a quart of spinach or one quart of green vegetables. In like taking effect of the food instead of eating pounds of meat. Nuxated Iron is used by over 4,000,000 people annually.

Beware of substitutes. Look for the letters "Nuxated" in every bottle. Your money will be refunded by the manufacturers if you do not obtain perfectly satisfactory results. At all druggists.



Jack Dempsey
campione del mondo
dei pesi massimi



Ty Cobb
campione di
baseball



Shirley Temple
l'attrice-bambina
(«riccioli d'oro»)



“Iron cocktail”



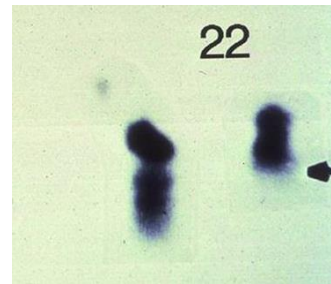
1929

1978
Viene finalmente e ufficialmente
riconosciuto che vi era stato un
errore, di un fattore dieci, nel calcolo
della quantità di ferro degli spinaci.

1960



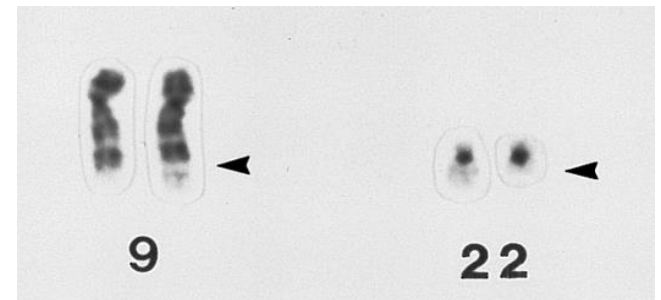
Peter Nowell David Hungerford



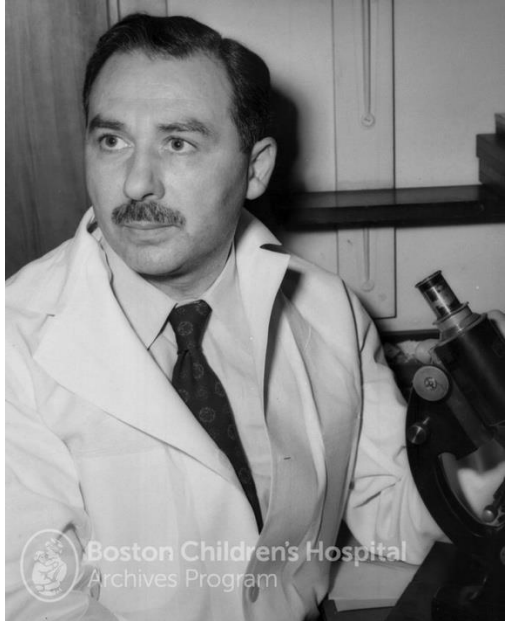
1972



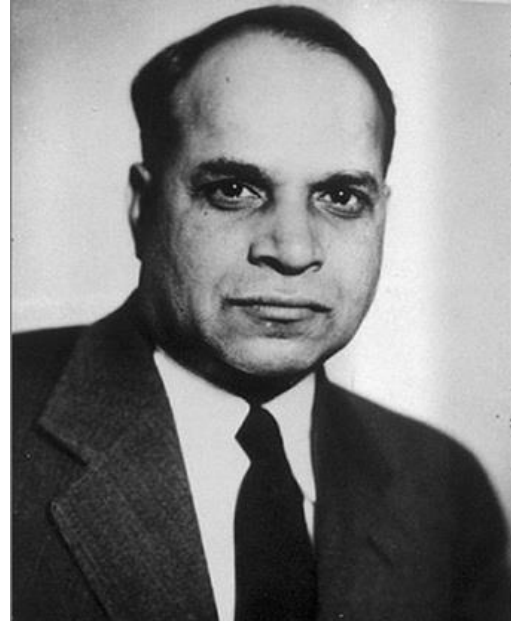
Janet Rowley



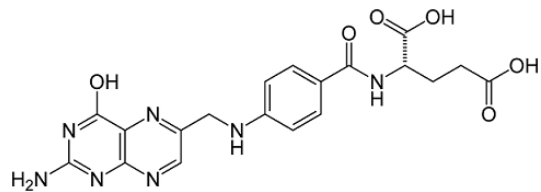
1947-48



Sidney Farber

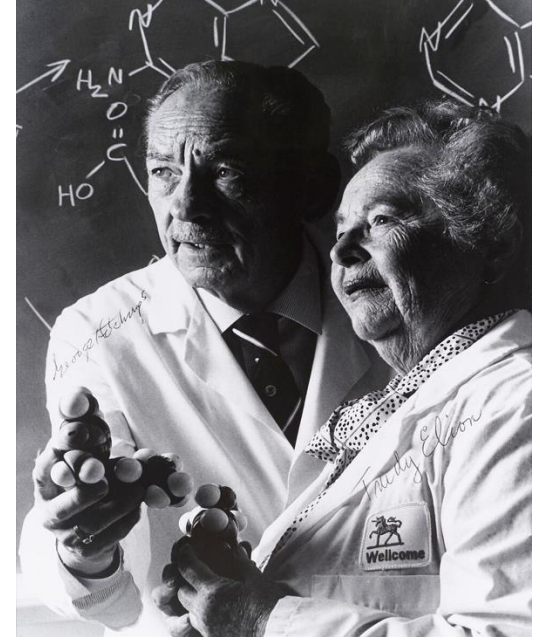


Yellapragada SubbaRow



Acido folico

1952



George H. Hitchings
e Gertrude B. Elion

Aminopterina
Methotrexate 6-mercaptopurina

1954



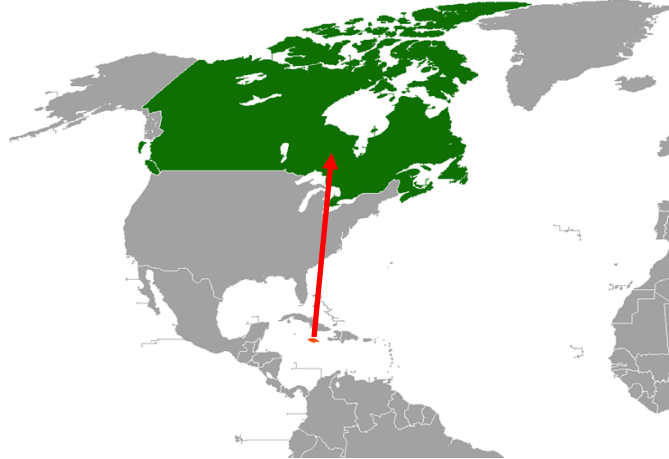
Joseph Burchenal

↓
Debbie Brown

1949



Vinca rosea



Robert Laing Noble

1959



Robert Laing Noble
e Charles Beer



1957-58



Denis P. Burkitt



1961



Anthony Epstein



Yvonne Barr

1964



EBV



Bert Achong

1921-22



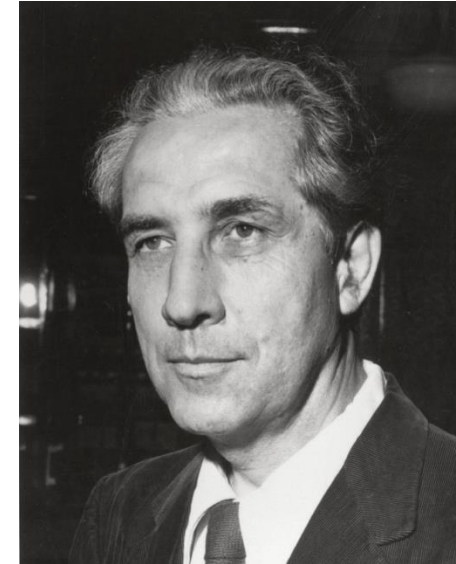
Melilotus officinalis

1933

Ed Carson

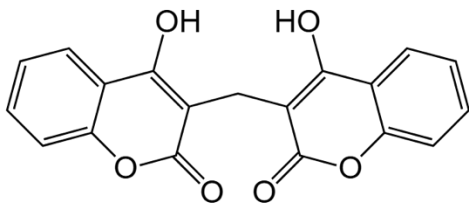


Wisconsin Alumni Research Foundation



Karl Paul Link

1939



dicumarolo 150 derivati → 42° warfarin

1948



1954



A COMPENDIUM OF REPORTED HUMAN BONE MARROW TRANSPLANTS¹

MORTIMER M. BORTIN

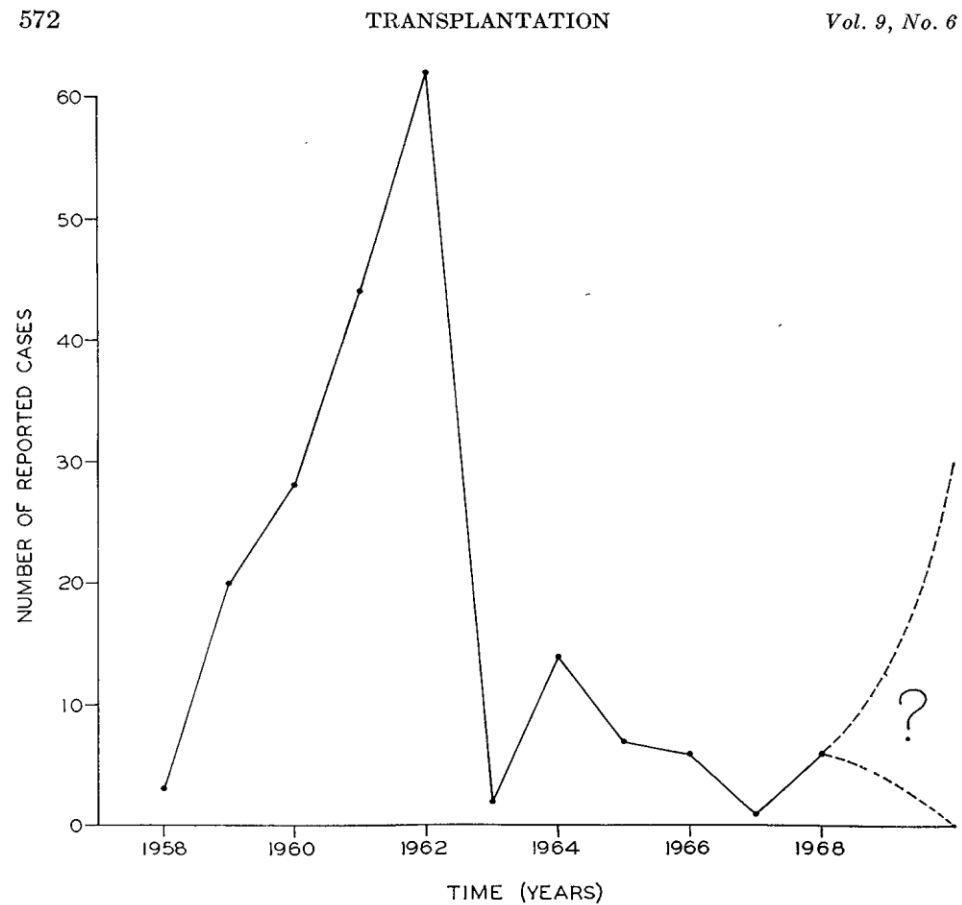


FIGURE 1. Reported human bone marrow transplants from 1958 to 1968.



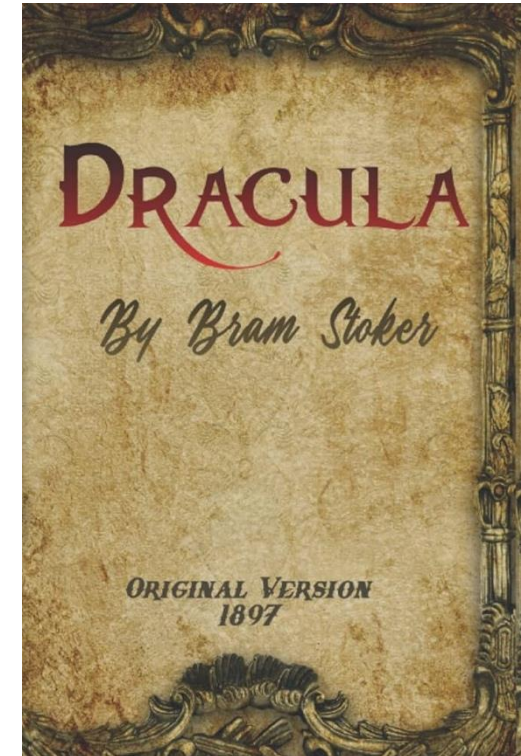
E. Donnall Thomas
Premio Nobel 1990



Girolamo Macchietti,
Medea ed Esone (1570-72)
Firenze, Studiolo di
Francesco I de' Medici



Marsilio Ficino
(1433-1499)
De vita libri tres



- Aging 2020, Vol. 12, No. 22

Circulating plasma factors involved in rejuvenation

Jae Sook Kang, Yong Ryoul Yang

- Alzheimer's Research & Therapy (2020) 12:70

Young blood plasma reduces Alzheimer's disease-like brain pathologies and ameliorates cognitive impairment in 3×Tg-AD mice

Ying Zhao et al.

- J Cell Mol Med. 2023;27:2804–2816

The rejuvenating influence of young plasma on aged intestine

Taha Ceylani et al.

- Nat Neurosci 26, 379–393 (2023)

Blood-to-brain communication in aging and rejuvenation

Bieri, G., Schroer, A.B. & Villeda, S.A.

- Nature Aging | Volume 4 | June 2024 | 814–838

Small extracellular vesicles from young plasma reverse age-related functional declines by improving mitochondrial energy metabolism

Xiaorui Chen et al.

- Heliyon 10 (2024) e32652

Rejuvenation of young blood on aging organs: Effects, circulating factors, and mechanisms

Meng-Nan Liu et al.

- Geroscience. 2024 Oct;46(5):4415-4442

Young blood-mediated cerebromicrovascular rejuvenation through heterochronic parabiosis: enhancing blood-brain barrier integrity and capillarization in the aged mouse brain

Rafal Gulej et al.

- Metab Brain Dis. 2024 Jun;39(5):985-1004

Blood-based therapies to combat neurodegenerative diseases

Jia Yee Lee et al.

- Journal of Neurology 271: 3682–3689 (2024)

Healthy blood, healthy brain: a window into understanding and treating neurodegenerative diseases
Neurological Update

Thyago R. Cardim-Pires, Aurélie de Rus Jacquet & Francesca Cicchetti

- Biogerontology (2025) 26:62

Rejuvenating the gut: young plasma therapy improves cell proliferation, IGF-I and IGF-IR expression, and immune defense in aged male rats jejunum

Ender Deniz Asmaz et al.

- GeroScience (2024) 46:367–394

Reversal of biological age in multiple rat organs by young porcine plasma fraction

Steve Horvath et al.



Grazie per l'attenzione