



# Use of Honey and Propolis in the Prevention and Treatment of Wounds

**Dr. Stefan Stângaciu**

**President of the Romanian Apitherapy Society**

**Honorary president of the German Apitherapy Society**

**Co-Founder of the Canadian Apitherapy Association**

**General secretary of the International Federation of Apitherapy**

# First some Bibliography...

- PUBMED

- Honey and wounds: 1050 studies  
(as of September 3, 2019)
- Propolis and Wounds: 225 studies  
(as of September 3, 2019)

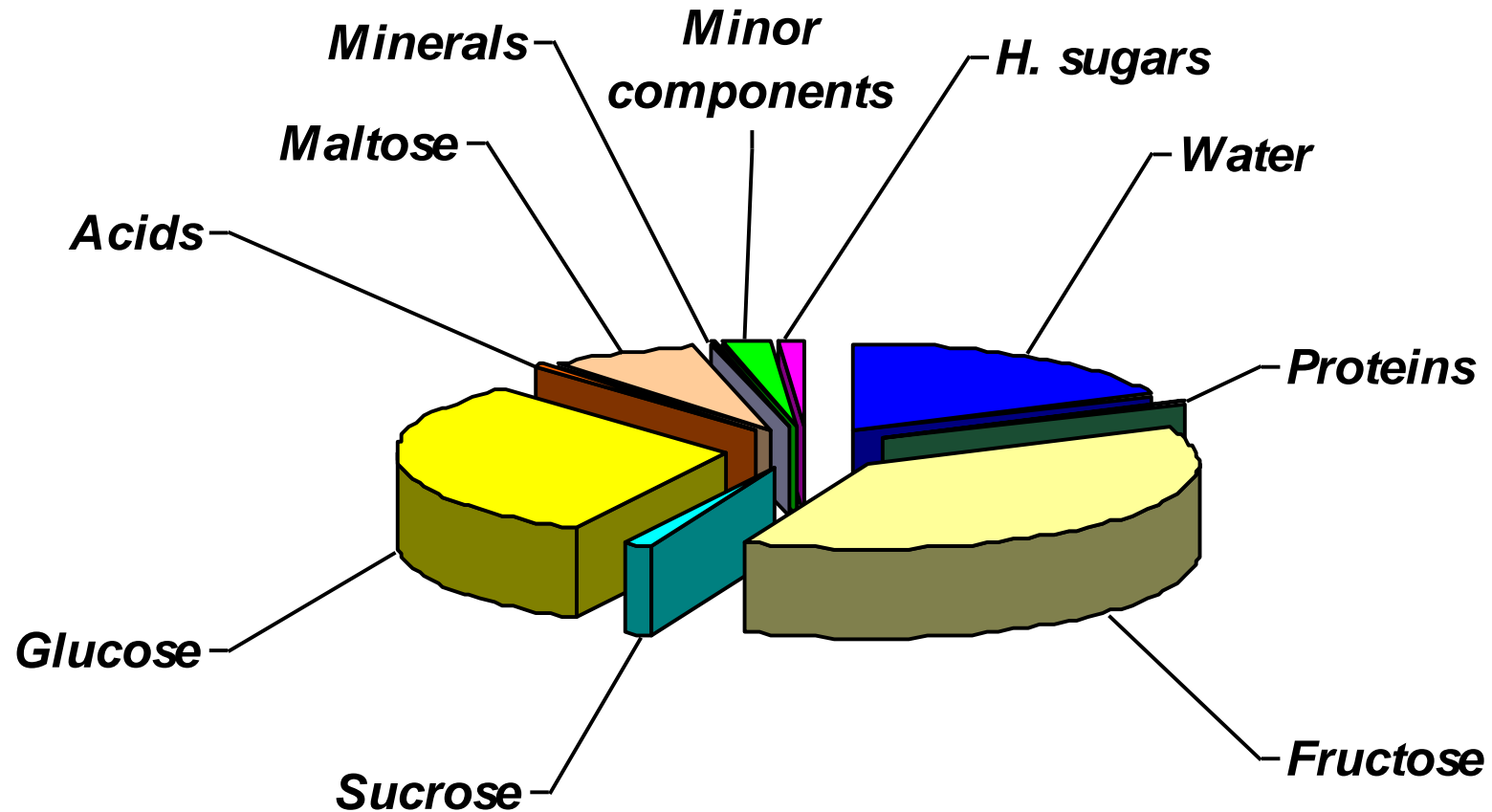
# A few references on the use of **honey** against wounds:

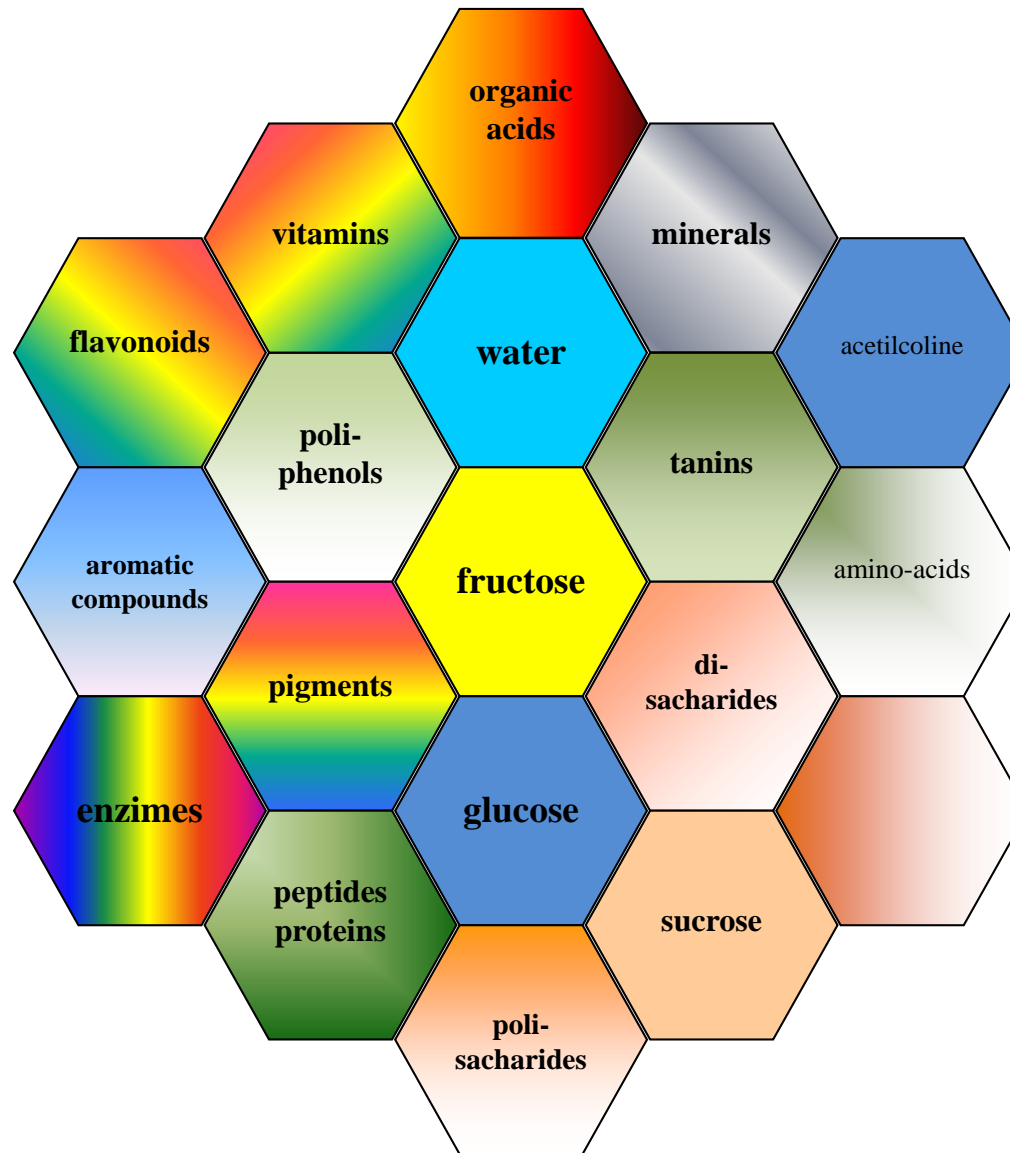
- **Honey**, Propolis, and Royal Jelly: A Comprehensive Review of Their Biological Actions and Health Benefits. Pasupuleti VR et al. Oxid Med Cell Longev. (2017)
- **Honey** as a topical treatment for **wounds**. Jull AB et al. Cochrane Database Syst Rev. (2015)

# A few references on the use of propolis against wounds:

- Vet World. 2018 Aug;11(8):1188-1195. doi: 10.14202/vetworld.2018.1188-1195. Epub 2018 Aug 29.
- **Mixing two different propolis samples potentiates their antimicrobial activity and wound healing property: A novel approach in wound healing and infection.** Al-Waili N<sup>1,2</sup>.

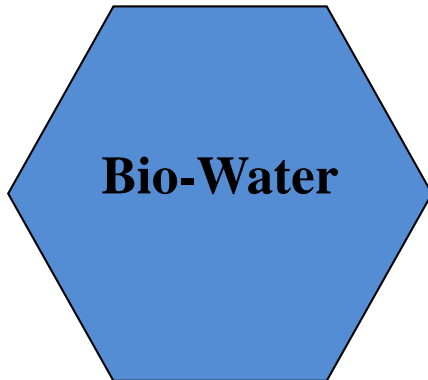
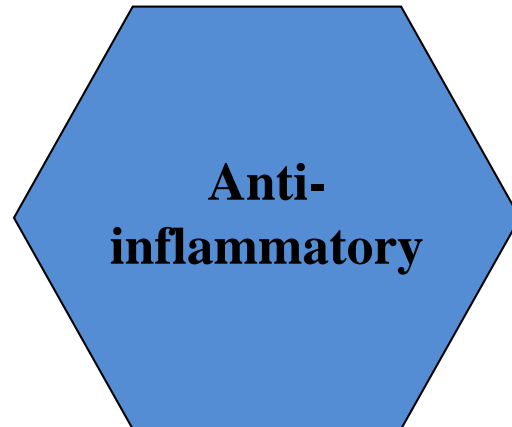
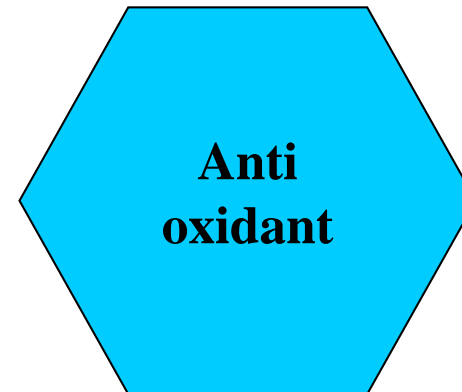
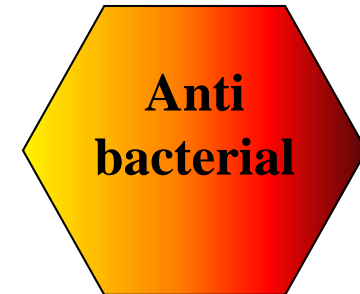
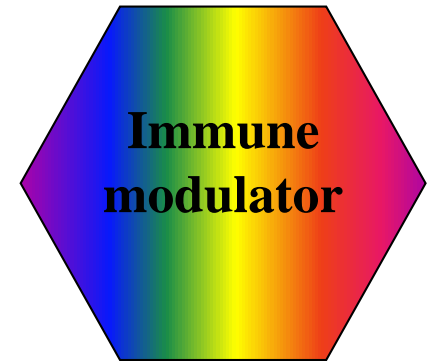
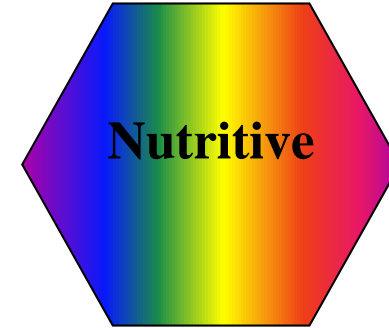
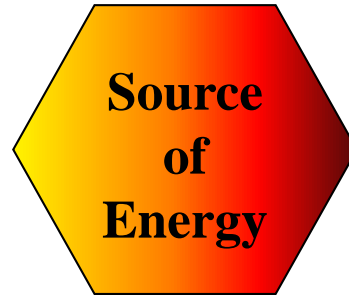
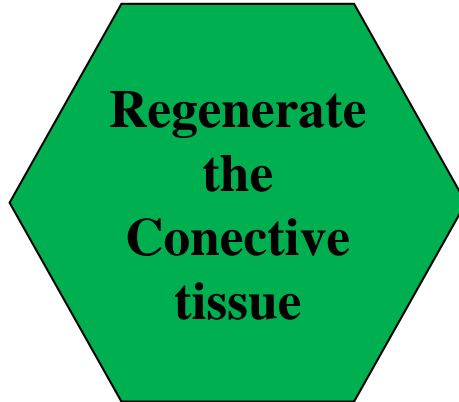
# Honey – Qualitative Composition



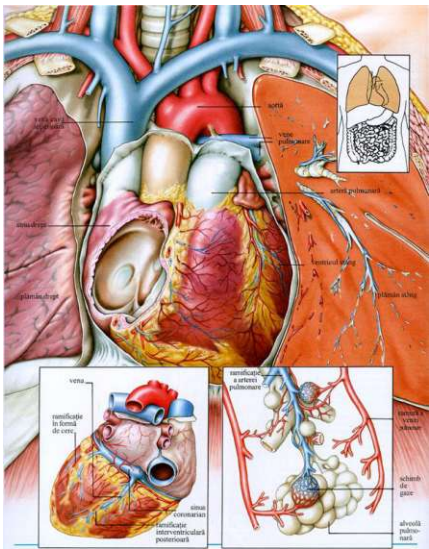


# Honey Properties

Importance of plant origin







Hawthorn  
*Crateagus spp.*



Rosehips  
*Rosa canina*



# Mechanisms of action of honey against wounds

- Subrahmanyam, 1991:
  - **prevents infection** because of its antibacterial properties;

- Subrahmanyam, 1991:
  - provides a **viscous barrier to fluid loss** and wound invasion by bacteria thus preventing infection;

- Subrahmanyam, 1991:
  - absorbs pus thereby **cleaning** the wound;

- Subrahmanyam, 1991:
  - **reduces pain, irritation and eliminates offensive smells**

Use of *Honey* against wounds, in Api-  
Ophthalmology

A few references from Romania...

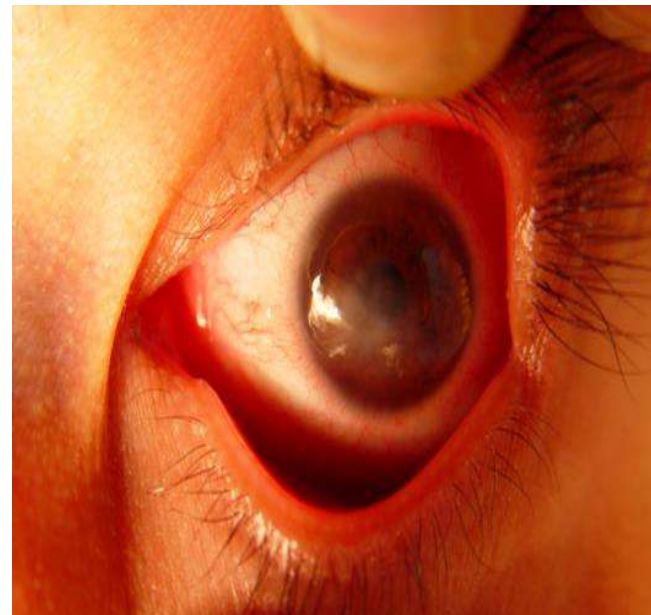
- **Popescu, M. P.; Palos Elena; Popescu Filofteia (1981) (Romania) - Traitement a la propolis en aerosols de quelques affections du pole anterieur de l'oeil** (abstract),  
in the XXVIII-Th. Apimondia Congress, Acapulco, Mexico, pp.489-90 (\*\*\*).
- **Popescu, M. P.; Palos Elena; Popescu Filofteia (1985) (Romania) - The results obtained following application of eye preparations (Colmel, Colgel, Oftalmosept) with biologically active honeybee products in palpebro-corneo-conjunctival diseases,**  
in the V-Th. Apitherapy Symposium, Cracow, Poland.
- **Popescu, M. P.; Palos, E.; Popescu, F. (1985) - Studiul eficacitatii terapiei biologice complexe cu produse apicole in unele afectiuni oculare localizate palpebral si conjunctival in raport cu modificarile clinico-functionale [Study of the efficiency of biological therapy with honey bee products in some palpebral and conjunctival affections in terms of clinical-functional changes],**  
in *Revista de Chirurgie Oncologie Radiologie O.R.L. Oftalmologie Stomatologie Seria Oftalmologie, Jan-Mar. 29 (1): 53-61.*

- **Popescu, M. P. (1986) (Romania) - What is propolis and how can it be used in ophthalmological therapeutics,**  
in *Rev-Chir (Oftalmol)*, Apr-Jun. 30(2), pp.149-54.
- **Popescu, M. P.; Popescu Alexandra Dana; Popescu, M. (1987) (Romania) - L'application des micelles moléculaires des produits apithérapeutiques dans quelques affections oculaires,**  
in the X-Th. Session of Balcanic Medical Days, June, 28-Th., Cluj-Napoca, Romania.
- **Popescu, Mircea *et al.* (1987) (Romania) - Micelii moleculare de produse apiterapeutice biologice active aplicate în unele afecțiuni oculare,**  
in *Apicultura. in Romania*, # 10, p.20.
- **Popescu, M. P.; Palos Elena; Popescu Alexandra Dana, Ardeleanu Aura (1987) (Romania) - The molecular mycelium of biologically active apitherapeutical products applied in some ocular diseases,**  
in the XXXI-St. Apimondia Congress, Warsaw, Poland.



- **Popescu, M. P.; Palos Elena; Popescu Filofteia (1987) (Romania) -**  
Efficacité de la **thérapeutique biologique complexe** par les **produits apicoles** dans certaines **affections oculaires**,  
in *Revue Francaise d'Apiculture*, Supplement au no. 465, July-August,  
pp.78-82.
- **Popescu, M. P.; Popescu, Dana (1994) (Romania) - Ophtalmo-apitherapy**  
(Romanian),  
in *"Apitherapy in Romania"*, Apimondia Publishing House, Bucharest,  
pp.76-113 (\*\*\*) .
- **Popescu, Mircea Petre; Popescu Alexandra (1997) (Romania) -**  
Application des **produits de la ruche** dans les **affections oculaire** et les  
resultats obtenues sur une periode de **21 ans**,  
in the XXXV-Th. Apimondia Congress, Antwerp, Belgium.

A highly interesting clinical case from Egypt...



**Prof. Mamdouh  
Abdulrhman  
(Egypt)**

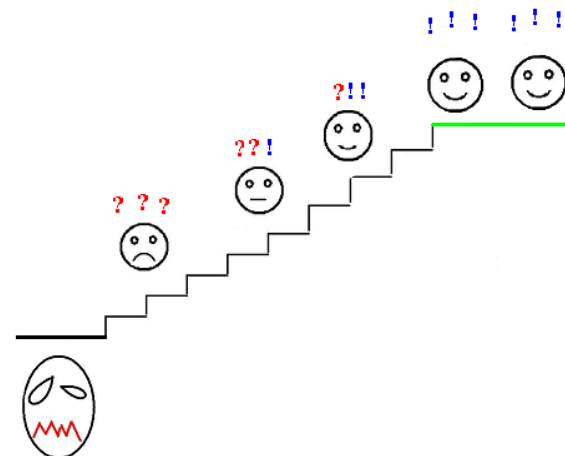
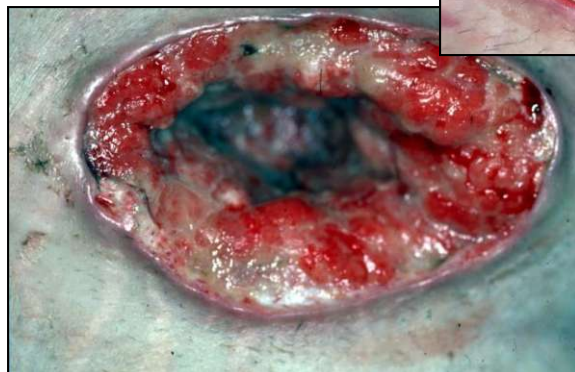
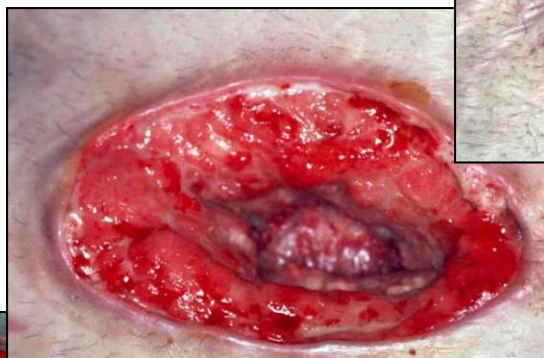
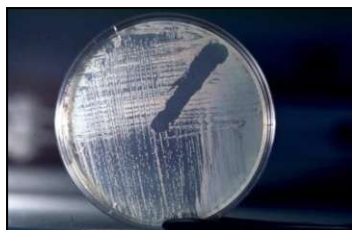
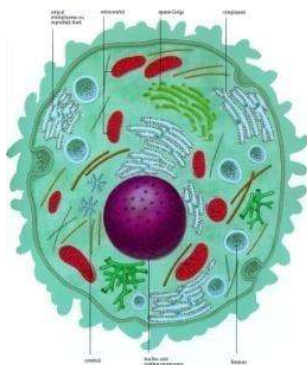
France...

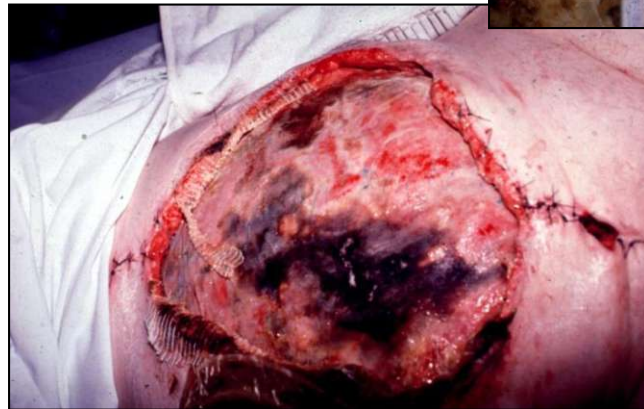
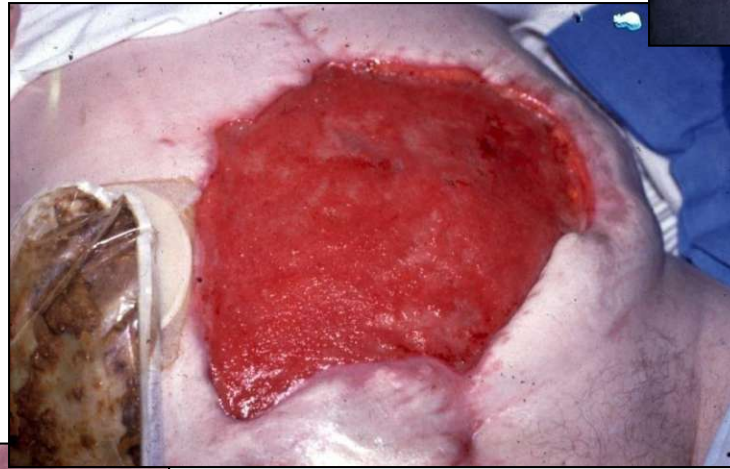
# Use of *Honey* against wounds by Prof. Bernard Descottes (France)

Over 3,000 cases treated with raw, unfiltered, unheated *thyme* honey



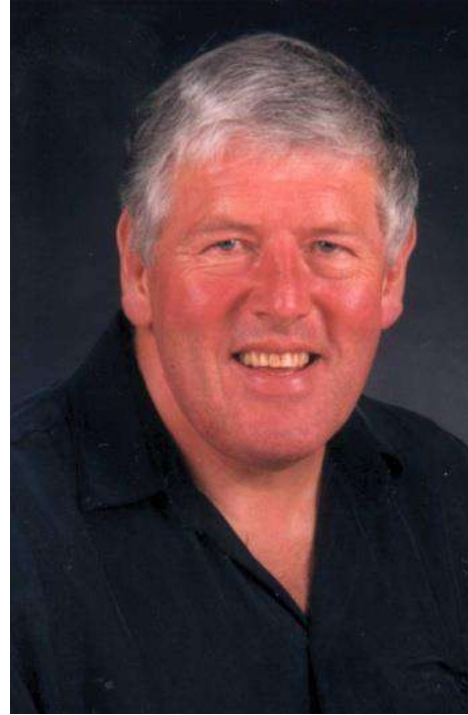






Prof. Peter Molan (New Zealand)





**Prof. Peter Molan** from Waikato University (Auckland) may be considered the “father” of modern medical research of honey (especially **Manuka honey**).



**Honey:** A Biologic Wound Dressing  
Molan P *et al.* **Wounds** (2015)



**Antibiogram with honey**



**Prof. Rose Cooper (UK)**  
Honey as natural antibiotic





**Prof. Dr. Shona BLAIR (Australia)**  
Manager at ithree Research Institute,  
When Bee Foundation, Sidney

*Honey – a sweet solution for problem pathogens and  
promoting digestive health*

# MANUKA HONEY

## MEDIHONEY





Use of *Malaysian* Honeys against wounds

Over 100 cases treated with success

Prof. Mohd. Yusoff Kamaruddin,  
University of Malaya, Kuala Lumpur/  
Canik Basari University, Samsun, Turkey



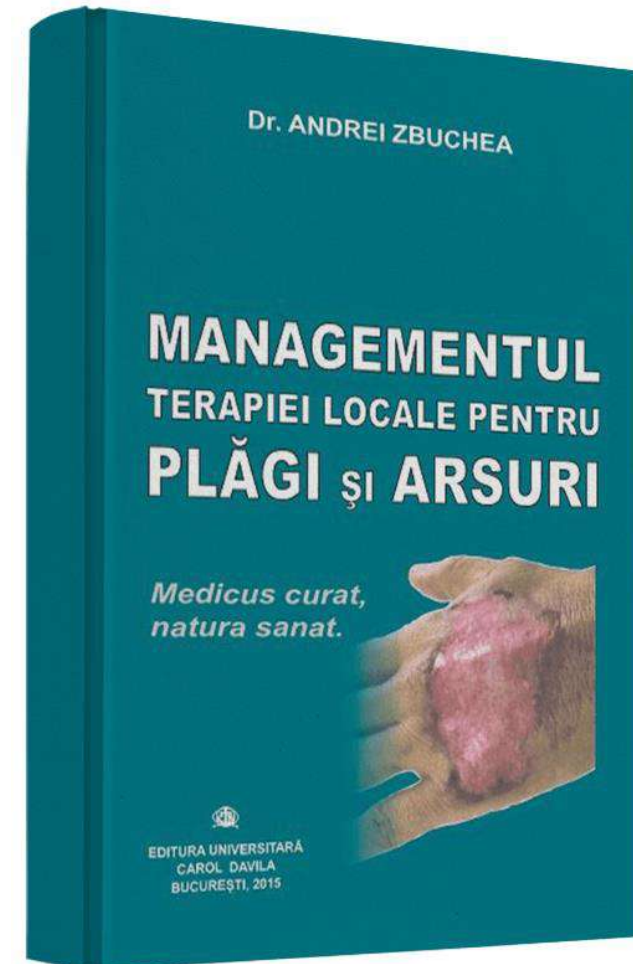




Romania...

# Dr. Andrei Zbucnea, Romania

## Use of Honey against burns



Man, 36 years old,  
scald burn  
injury, II-III degree, both  
ankles and feet

Feet and ankles, after initial burn wound debridement  
and before L- Mesitran application



5 days after L- Mesitran application



9 days after L- Mesitran application - burn eschar removal





12 days after L- Mesitran application  
- marginal epithelization



14 days after L- Mesitran application  
- progressive epithelization





19 days after L- Mesitran application  
- almost complete epithelization



26 Tage nach L-Mesitran-Anwendung  
- quasi integrale Epithelisierung

26 days after L- Mesitran application  
- quasi integral epithelization



Dr. Francesco Feraboli, Italy...

**MIELE**

<http://www.apicolturaonline.it/apiterapia>

Dr Francesco Feraboli

S.B.

Sesso: M. Anni: 28.

Ulcera da decubito al malleolo mediale sinistro in esiti di frattura del malleolo tibiale, contaminata da *Staphylococcus Aureus*.

Medicazioni a giorni alterni con zucchero e miele millefiori





Guarigione a 60 giorni.

***MIELE***



Dr Francesco Feraboli

<http://www.apicolturaonline.it/apiterapia>

What honey is the best honey for the treatment of wounds?







# Use of *Propolis* against Wounds

## **Composition of Propolis**

**Over 300 different substances have been identified**

# QUALITATIVE COMPOSITION OF PROPOLIS

- Flavonoids
- Chalcones, Dihydrochalcones
- Aliphatic acids and their esters
- Long chain aliphatic acids
- Short chain volatile oils

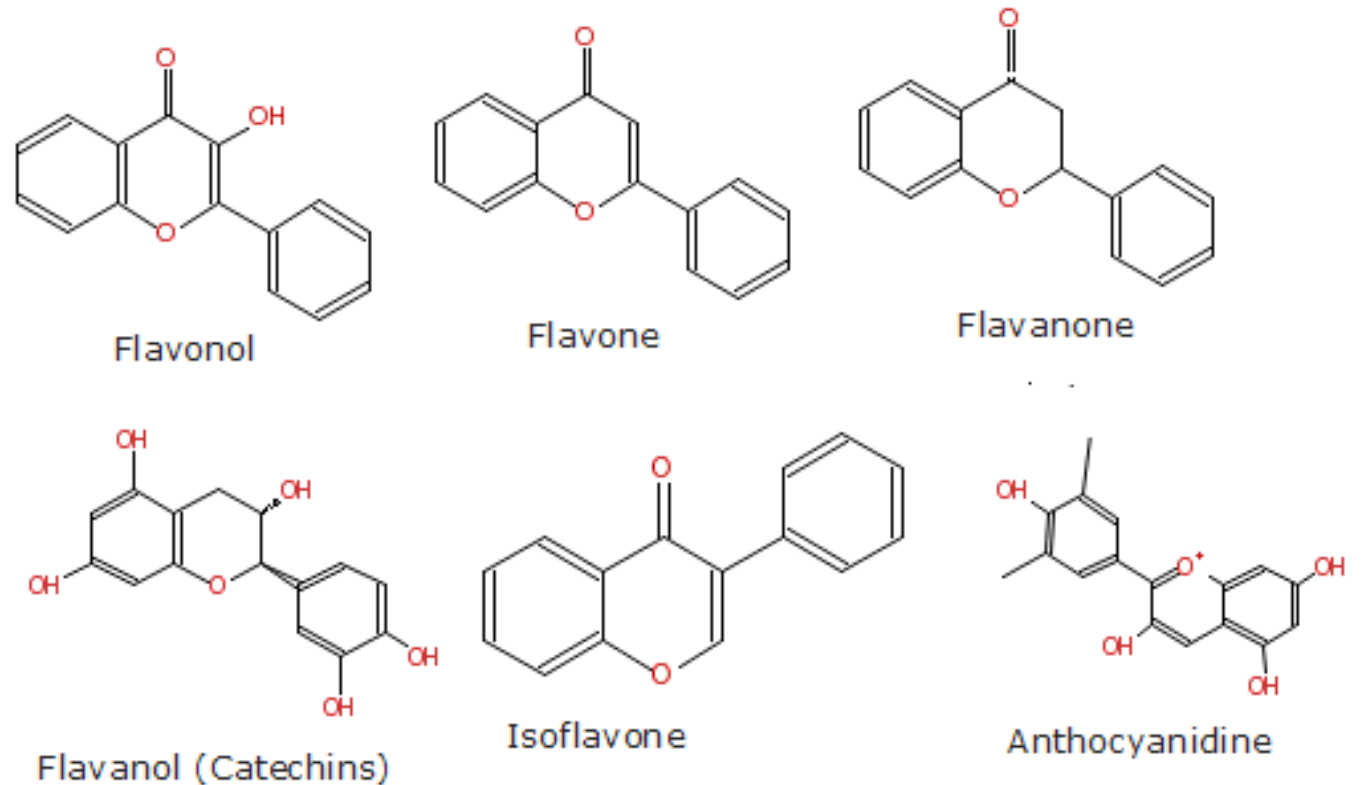


photo source

Structures of the major classes of flavonoids

# **Properties**

**There are over *70* useful properties in propolis and its extracts...**

**Antioxydant**

**Antibacterial, Antiviral**

**Antimycotic, Antiparasitic, Antiinflammatory**

**Cicatrising, Antitumoral**

# PROPERTIES OF SOME OF THE PROPOLIS COMPOUNDS

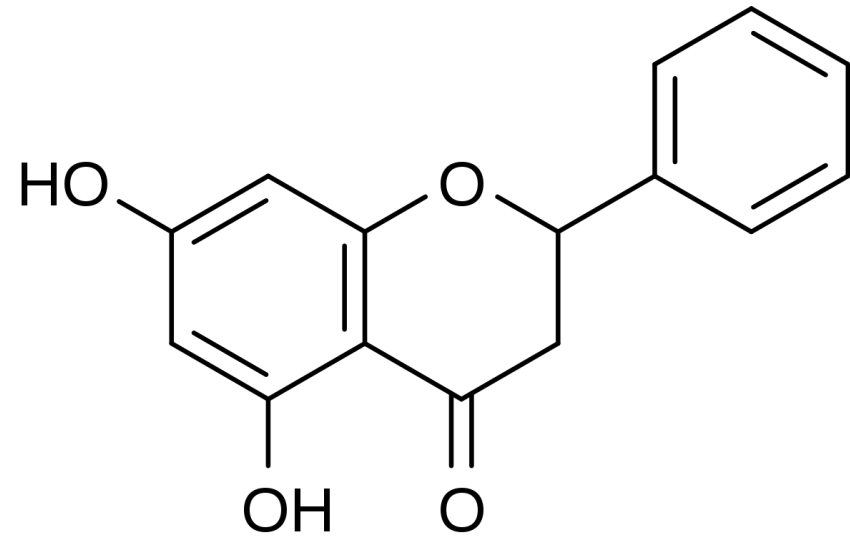
- **PINOCEMBRIN**

**Antibacterial**

**Antifungal,**

***Anti-Helicobacter Pylori***

**Local analgesic**





- **GALANGIN**

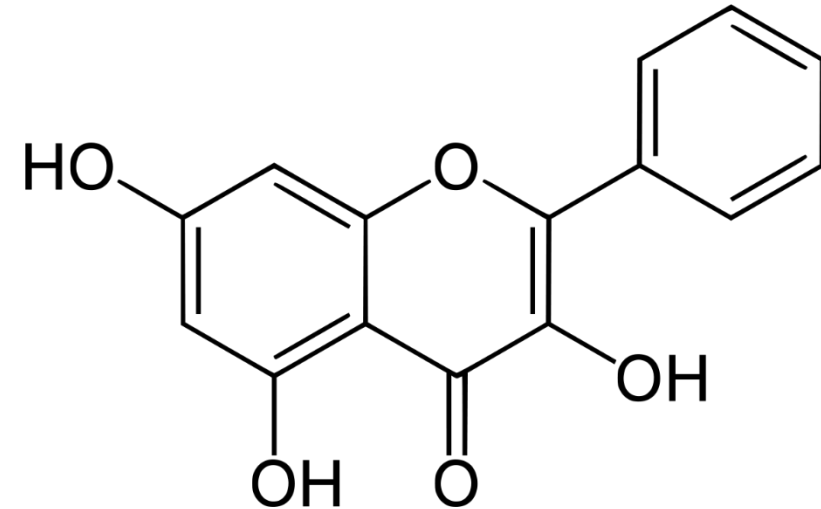
**Antibacterial**

**Antifungal,**

***Anti-Helicobacter pylori***

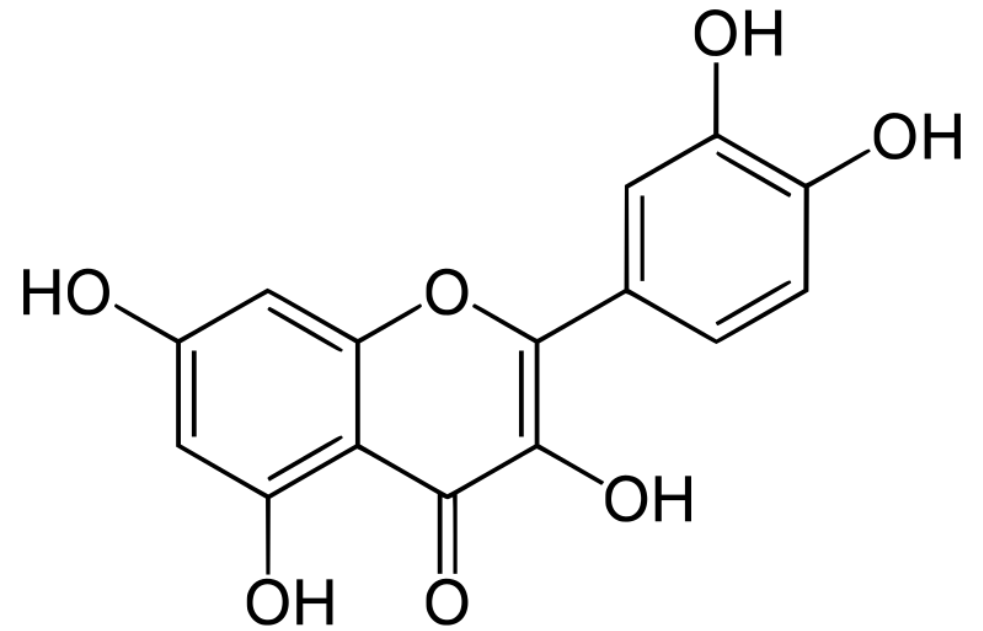
**Antioxidant**

**Anti-inflammatory**



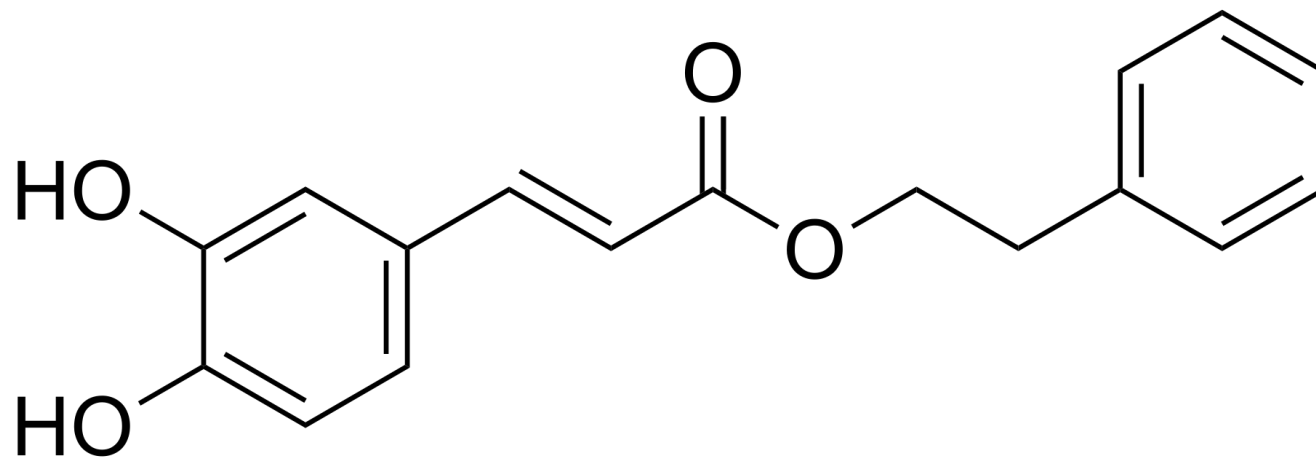
- **QUERCETIN**

**Antiviral,  
Antitumoral,  
Strengthens the capillaries**



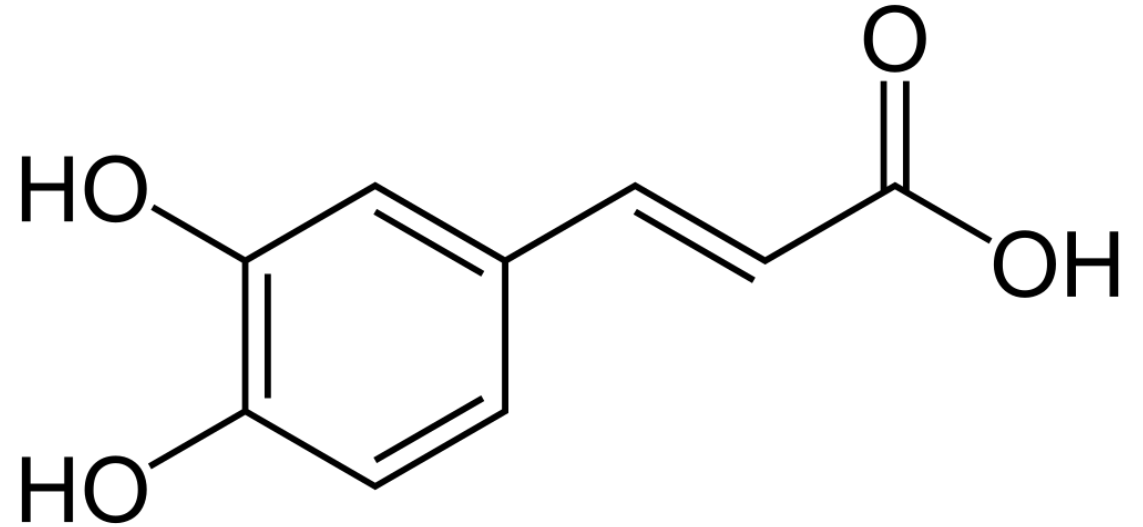
- **CAPE**  
(Caffeic Acid Phenethyl Ester)

**Antioxidant,  
Anti-inflammatory,  
Cytotoxic,  
Antitumoral,  
  
Hepatoprotector**



- **Caffeic acid**

**Antioxidant,  
Antiviral,  
Antibacterial,  
Anti-inflammatory,  
Hepatoprotector**



Some clinical cases...

# Dr. Francesco Feraboli (Italy)





## ***PROPOLI***

<http://www.apicolturaonline.it/apiterapia>

B.L.

Sesso : M. Anni : 58. Grave frattura esposta settica di avambraccio.  
(Contaminazione da *Staphylococcus aureus* e *Acinet. Lwoffii*)



Dr Francesco Feraboli

## ***PROPOLI***

Medicazioni cotidiane con propoli alcolica. (Nessuna terapia antibiotica)



Dr Francesco Feraboli

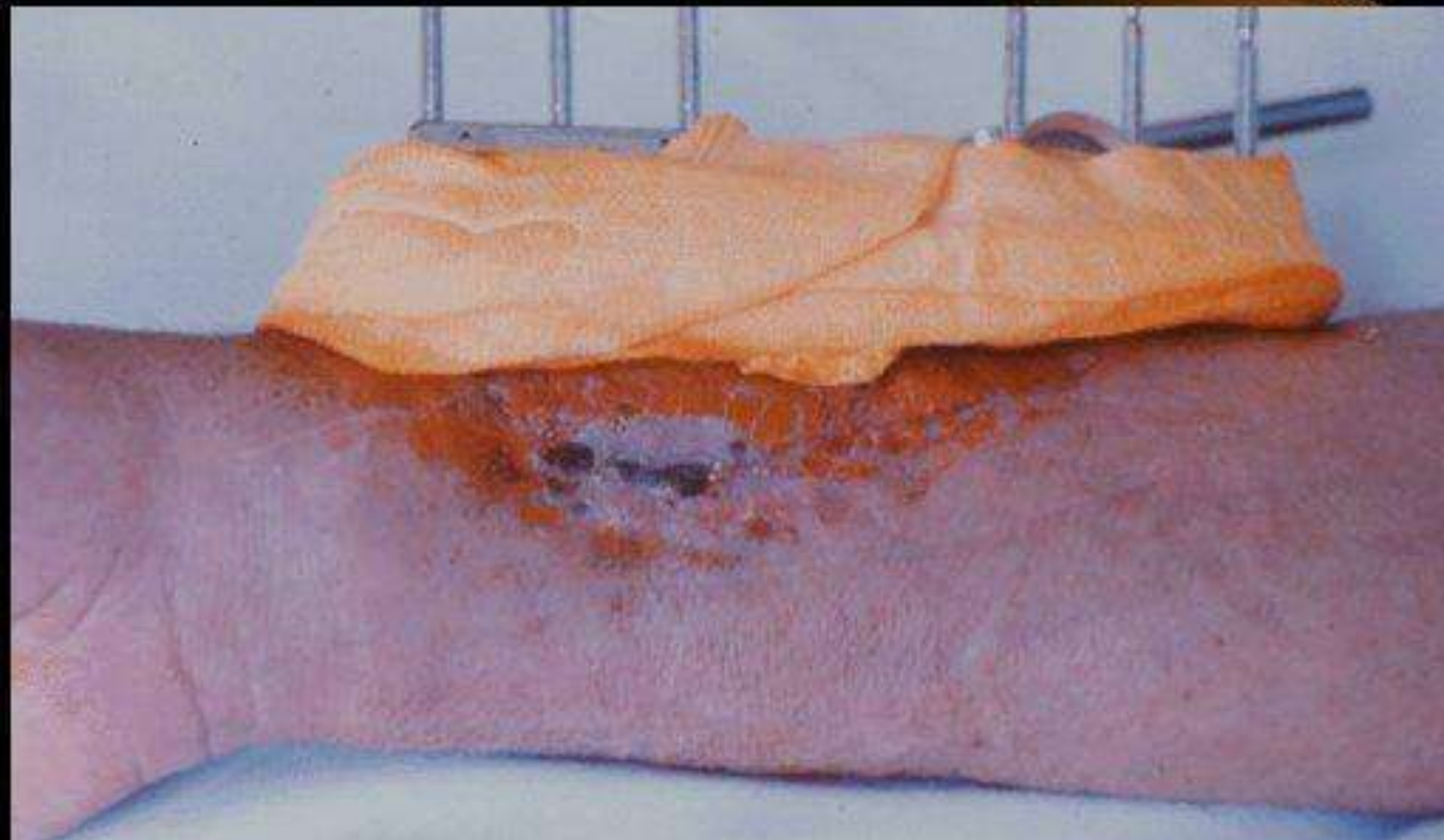
<http://www.apicolturaonline.it/apiterapia>

**PROPOLI**

<http://www.apicolturaonline.it/apiterapia>

**Guarigione a 28 giorni.**

Dr Francesco Feraboli





***PROPOLI***

Dr Francesco Feraboli

<http://www.apicolturaonline.it/apiterapia>

D.G.F.

Sesso : M. Anni : 22. Incidente motociclistico . Amputazione traumatica della gamba destra e frattura esposta del femore destro con lacerazione dell'arteria femorale.



## ***PROPOLI***

Eseguita in urgenza la sintesi della frattura del femore e la sutura dell'arteria femorale , si è dovuto procedere in un secondo tempo alla amputazione di coscia per una sopravvenuta infezione da *Staphylococcus aureus* con trombizzazione dell'arteria femorale.

<http://www.apicolturaonline.it/apiterapia>

Dr Francesco Feraboli





## ***PROPOLI***

<http://www.apicolturaonline.it/apiterapia>

Persistendo l'infezione , nonostante la terapia antibiotica , ho eseguito per 30 giorni medicazioni locali con propoli alcolica e propoli grezza applicata direttamente sul moncone d'amputazione.



Dr Francesco Feraboli



## ***PROPOLI***

Dr Francesco Feraboli

La risoluzione dell'infezione è avvenuta in 20 giorni circa e la cicatrizzazione della ferita in 90 giorni.



## ***PROPOLI***

L.A.

Sesso : M. Anni : 49.

Frattura esposta dell'anca sinistra.

Osteosintesi con chiodo endo=  
midollare e successiva infezione  
da *Staphilococcus Aureus* ,  
*Enterobacter cloacae* ed  
*Enterococcus faecalis*.



## ***PROPOLI***

Rimozione del chiodo endomidollare  
dopo 3 mesi dall'impianto ,  
applicazione di collana di perle di  
antibiotico (Gentamicina) e  
prosecuzione per 20 giorni di terapia  
antibiotica in vena.





## ***PROPOLI***

A 5 mesi dal 1° intervento si esegue nuova pulizia chirurgica senza ottenere la risoluzione dell'infezione. Suspendo tutta la terapia antibiotica ed inizio ad infiltrare le fistole fino all'interno del femore con propoli alcolica (2 volte al dì per 21 giorni).



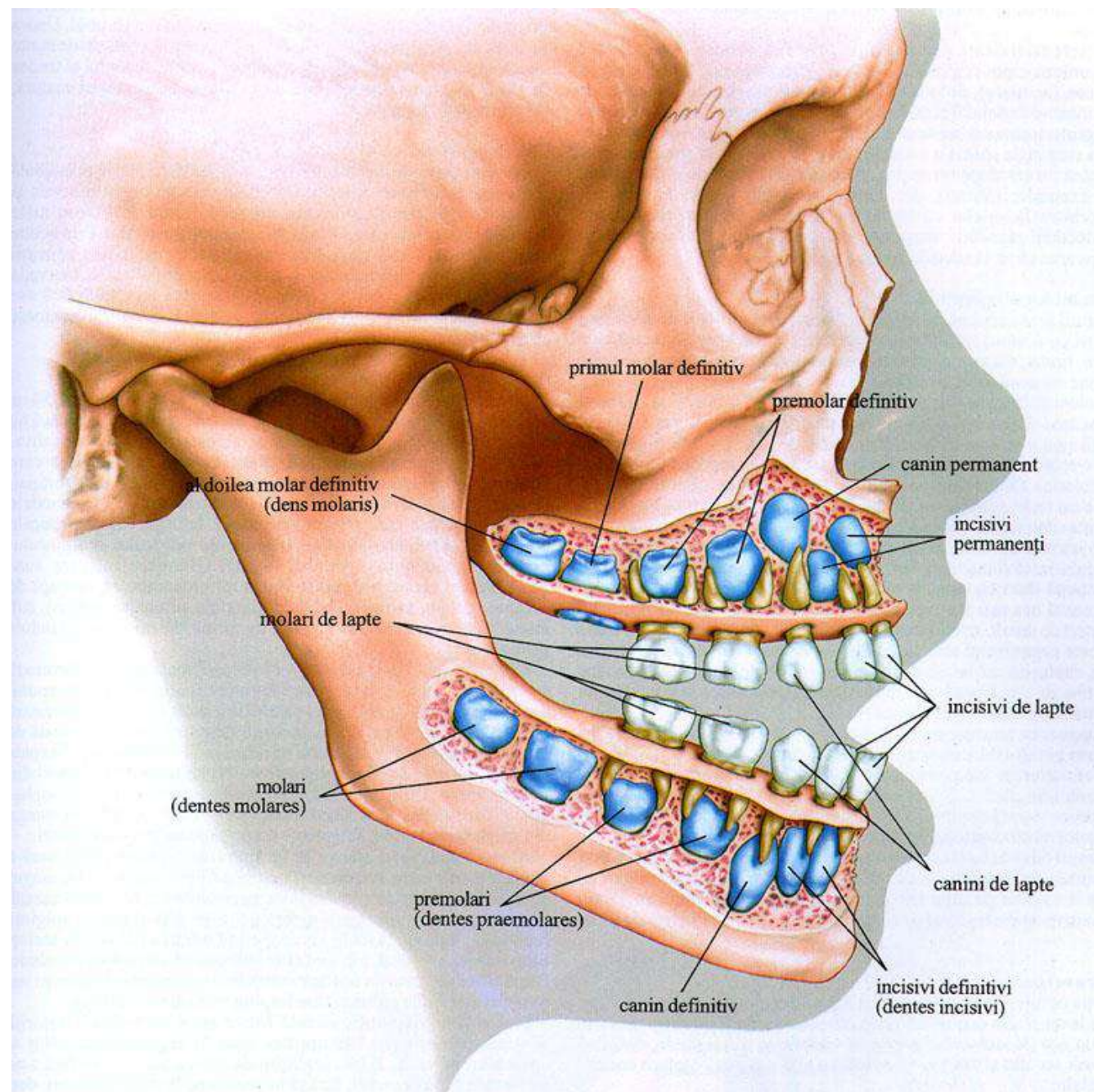
## ***PROPOLI***

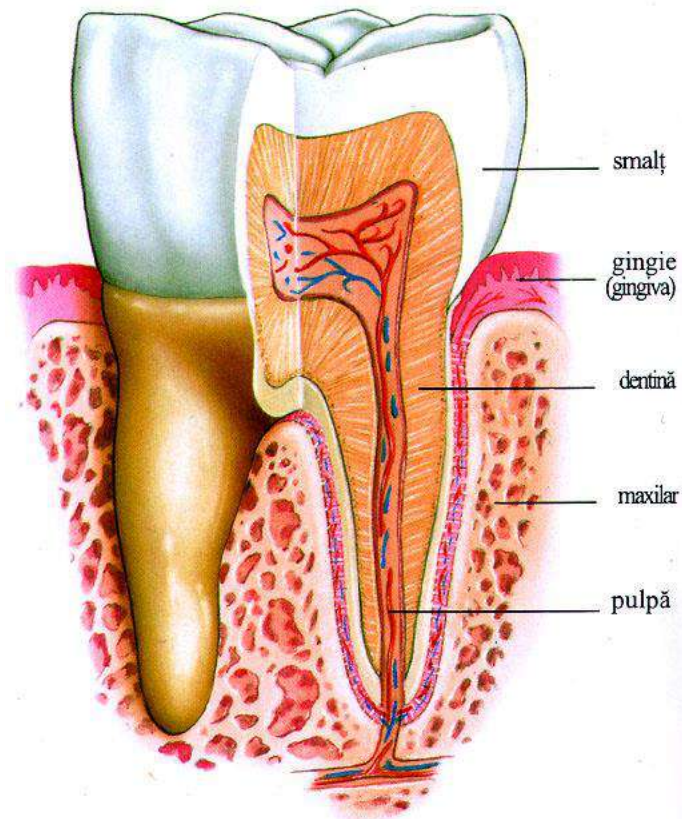
Guarigione dopo 30 giorni dall'inizio del trattamento con propoli.



# Use of Propolis in **Dentistry**



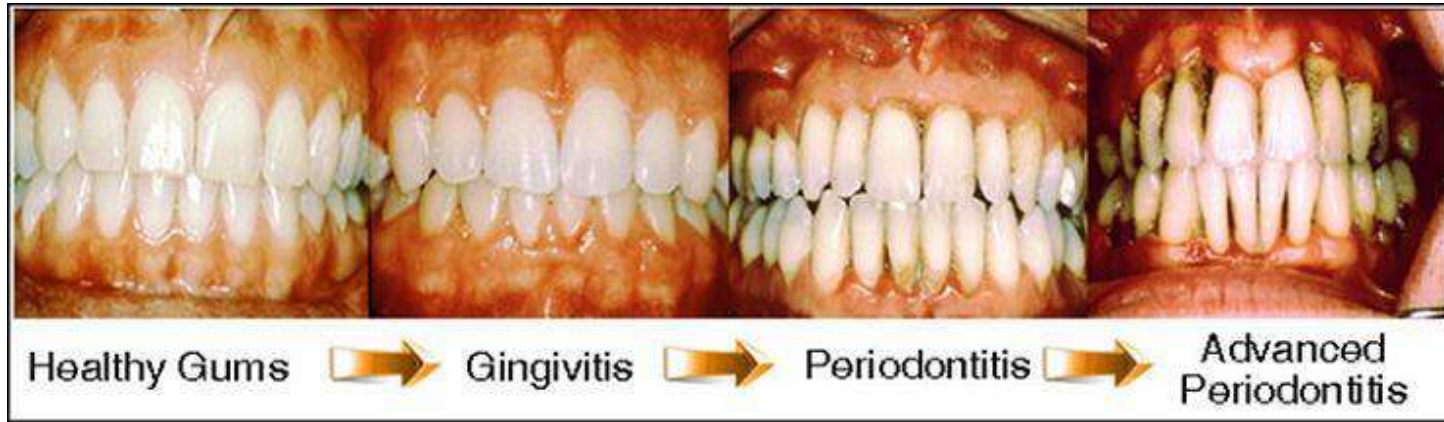




**Smaltul** care alcătuiește suprafața exterioară a dinților este materia cea mai dură a corpului. Sub el se află dentina care protejează pulpa cu o rețea de nervi și artere. Dinții de lapte ai copilului (albi) sunt înlocuiți de dinții permanenți (albaștri) de îndată ce străpung gingia (la dreapta). Cei opt premolari definitivi, câte doi pe fiecare parte a mandibulei și a maxilei - schimbă molarii copilului, molarii definitivi cresc în jumătățile posterioare ale maxilarelor în locurile rămase libere până atunci. Desenul dentiției conține opt molari definitivi. În spatele acestora mai pot ieși patru măsele de minte. Caninii și incisivii din partea anterioară a maxilarelor servesc pentru mușcat și mărunțit mâncarea, premolarii și molarii o triturează pentru a fi înghițită.

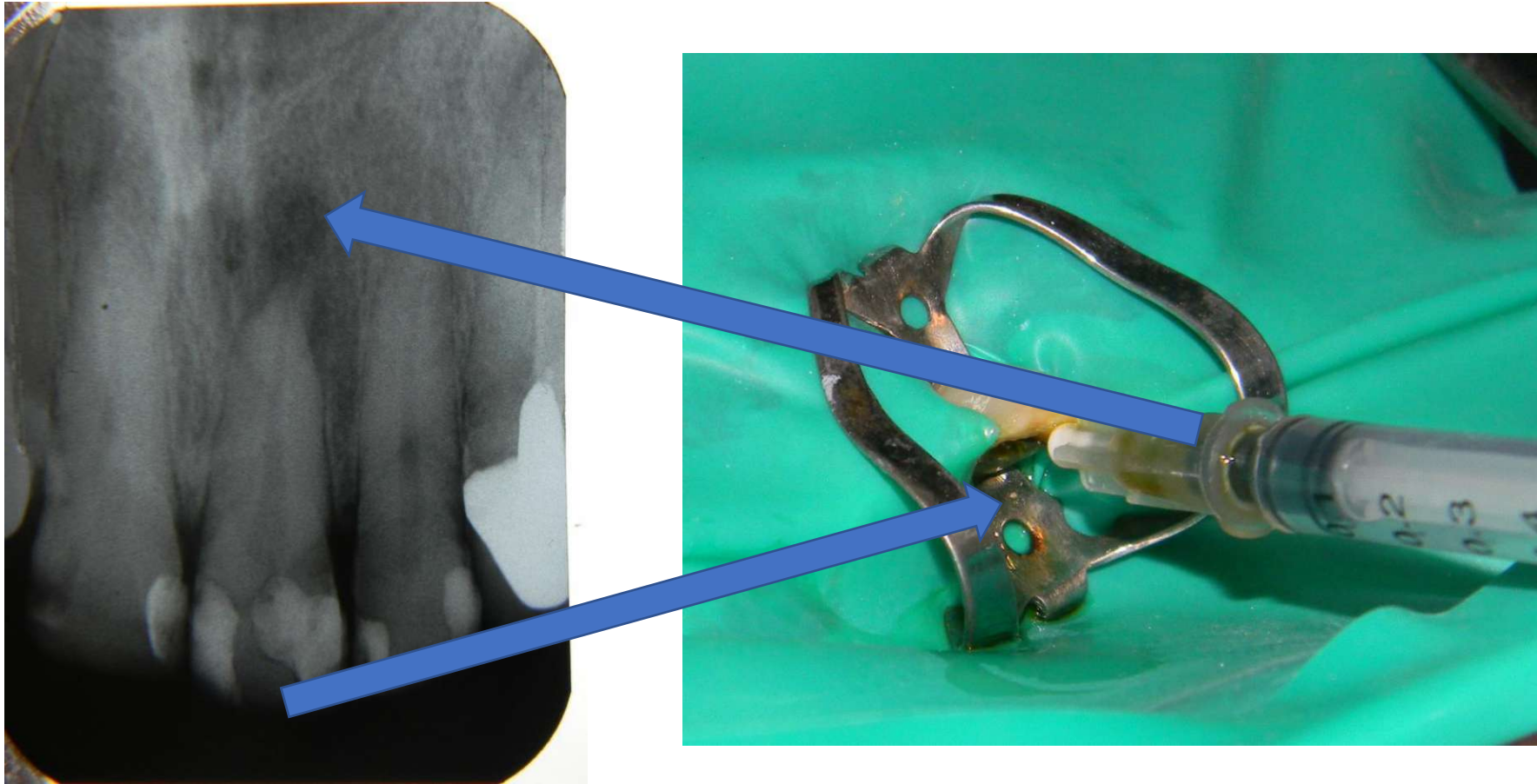


# Propolis against Periodontitis





**Dr Rafael Felitti,**  
specialist in the use of honey and propolis in  
Dentistry in Montevideo



Injection of propolis tincture in the tooth canal



# Frau Voigtlaender case



First day – after use of Propolis tincture





First day – after use of Propolis tincture





First day – after use of Propolis tincture



Third day – after use of her own Propolis cream





Third day – after use of Propolis cream



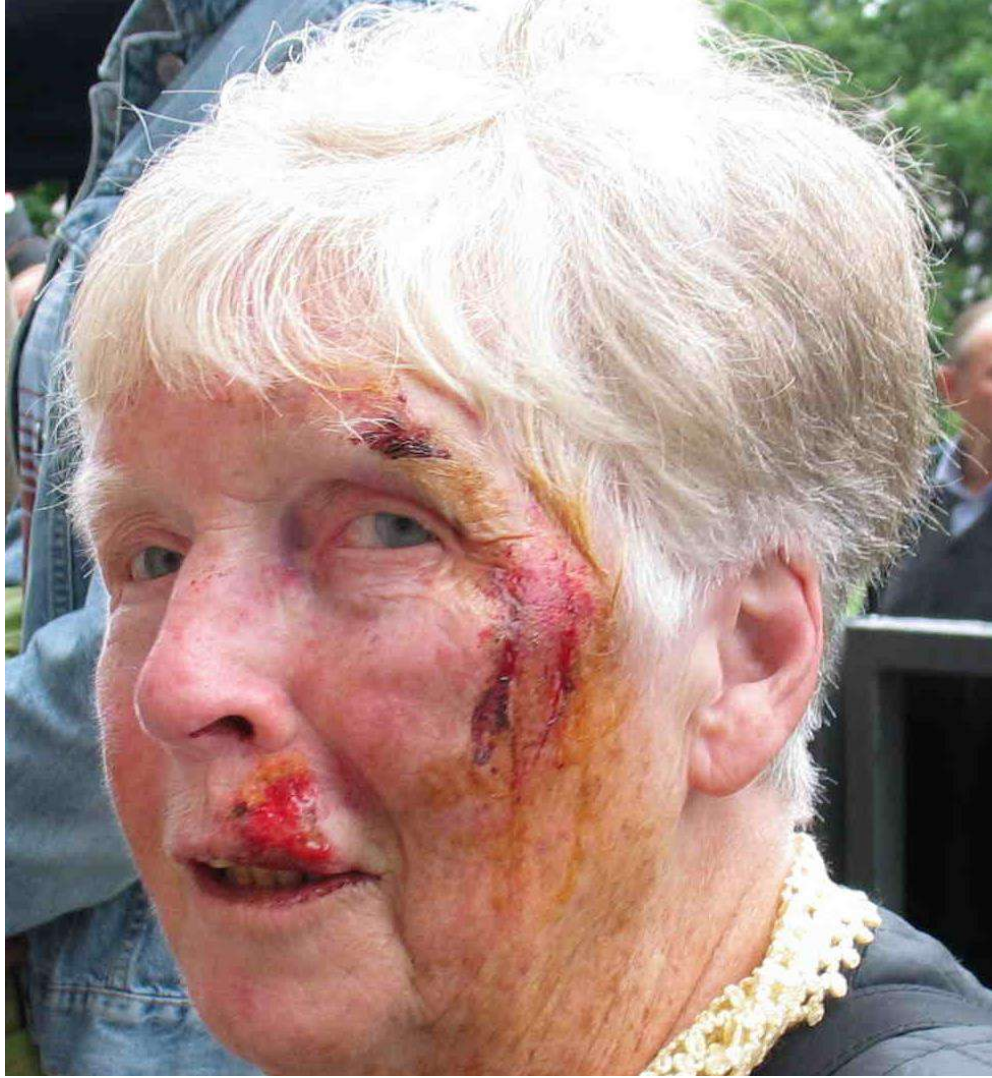
13-Th. day



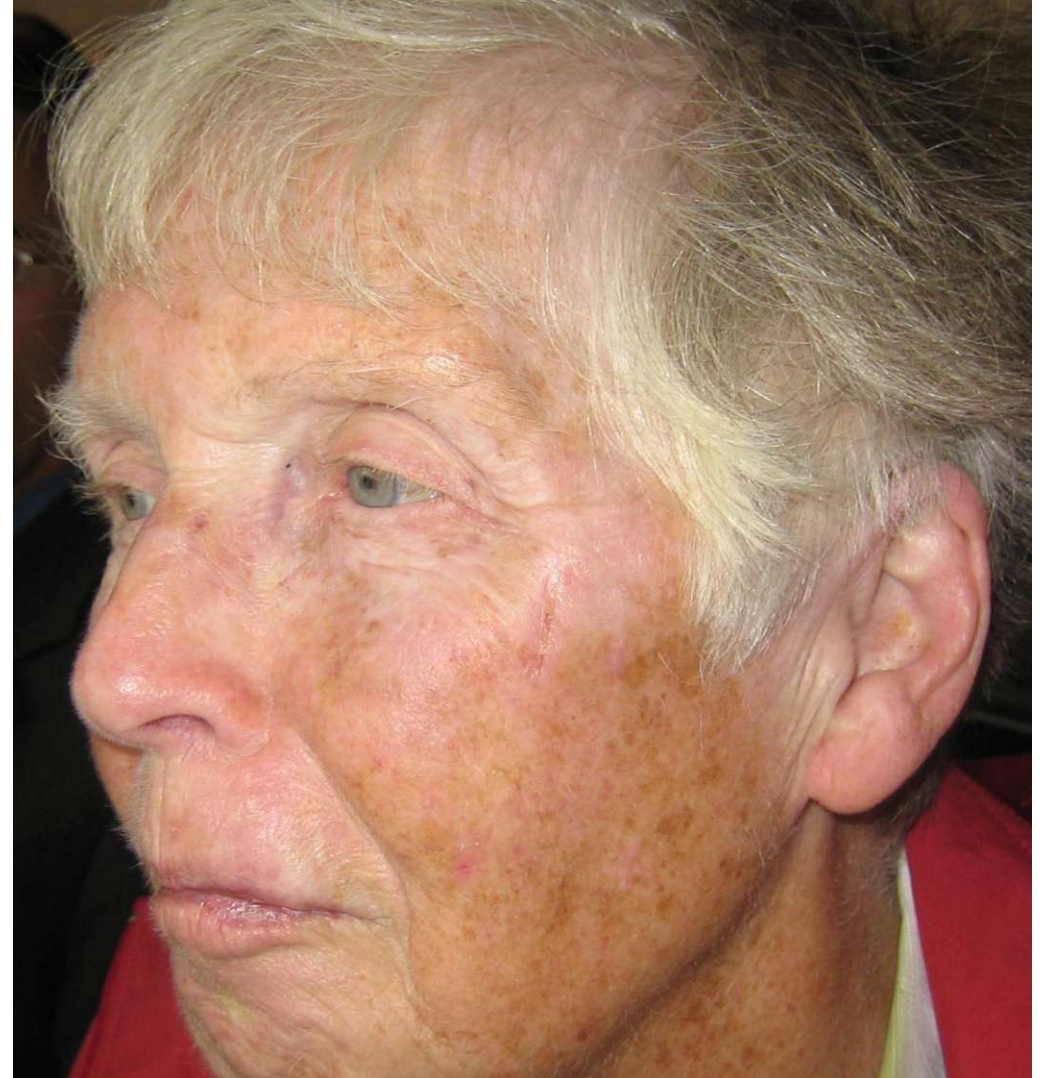


13-Th. day





Day 1



Day 13

# Heinz Neukum (Germany)

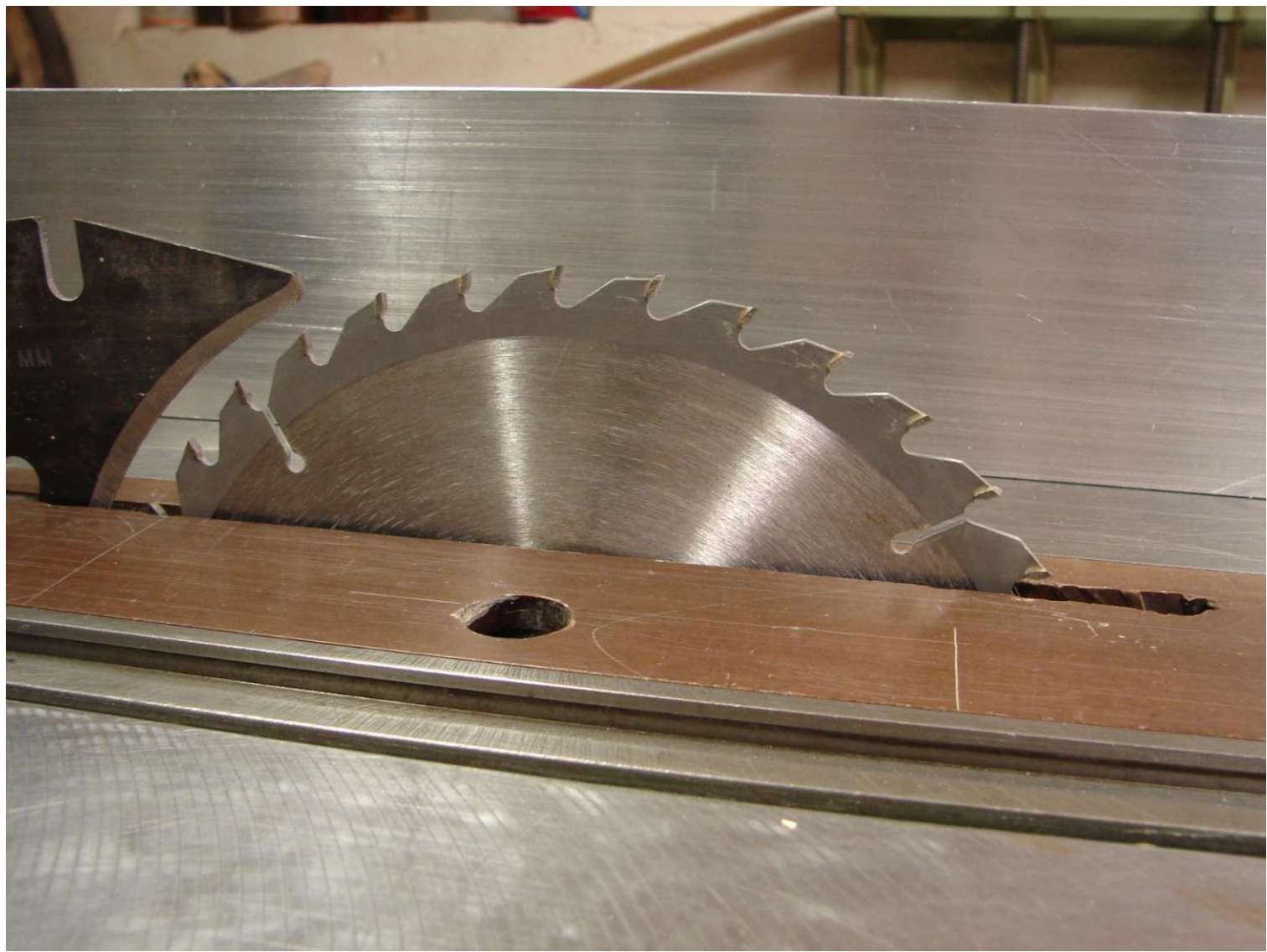


Litzbühlstrasse 10  
79780 Stühlingen / Unterwangen  
E-mail : [Neukum-Biene@freenet.de](mailto:Neukum-Biene@freenet.de)

Before











After  
cut





After Propolis Tincture



**Plamen Entchev, M.D. (Bulgaria)**  
Internal Medicine, Apitherapy, Homeopathy  
[plentchev@yahoo.com](mailto:plentchev@yahoo.com)





21 December 2008



16 March 2009



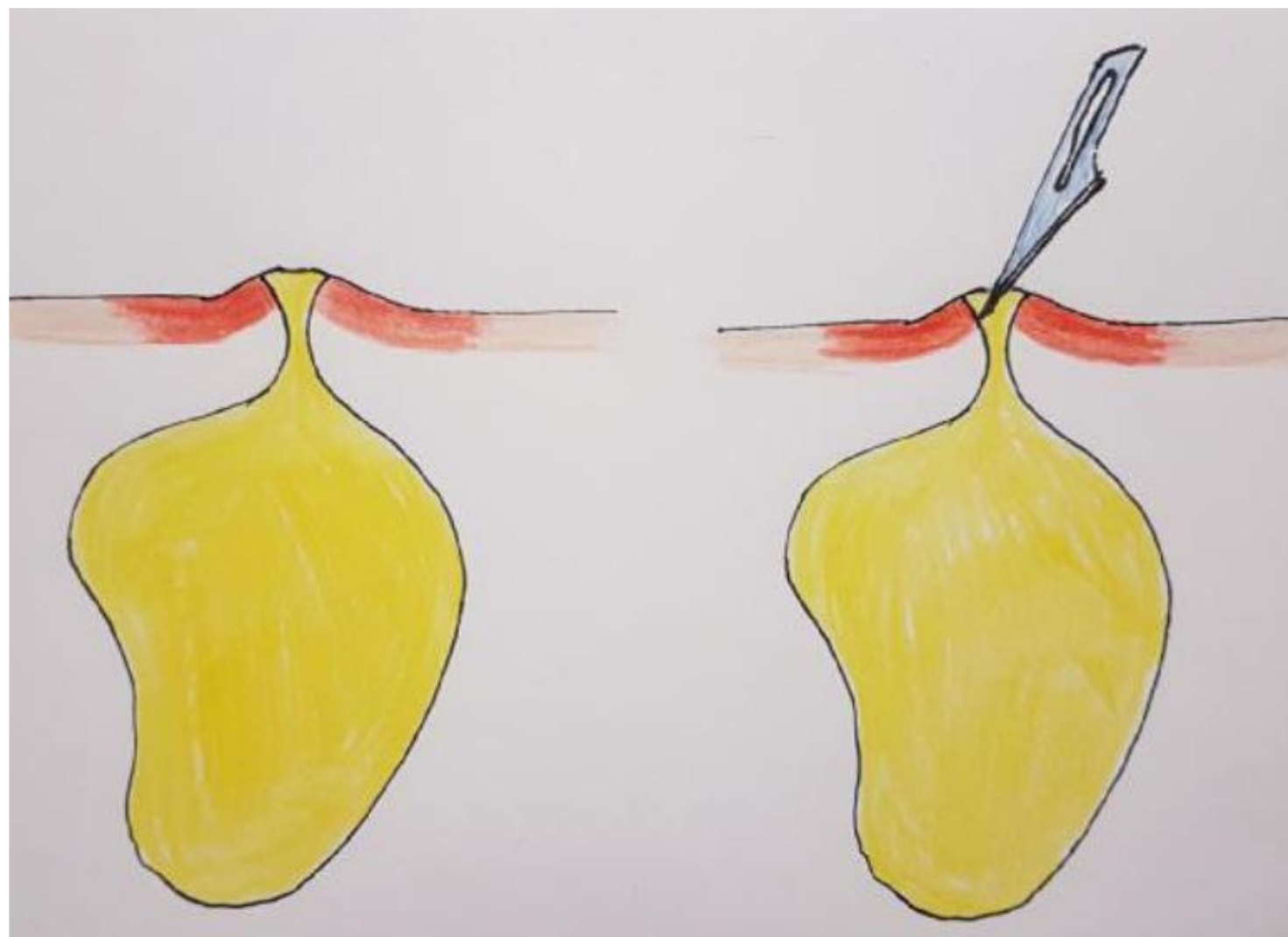
Dr. Mathias Holeiter (Switzerland)  
mholeiter@bluewin.ch

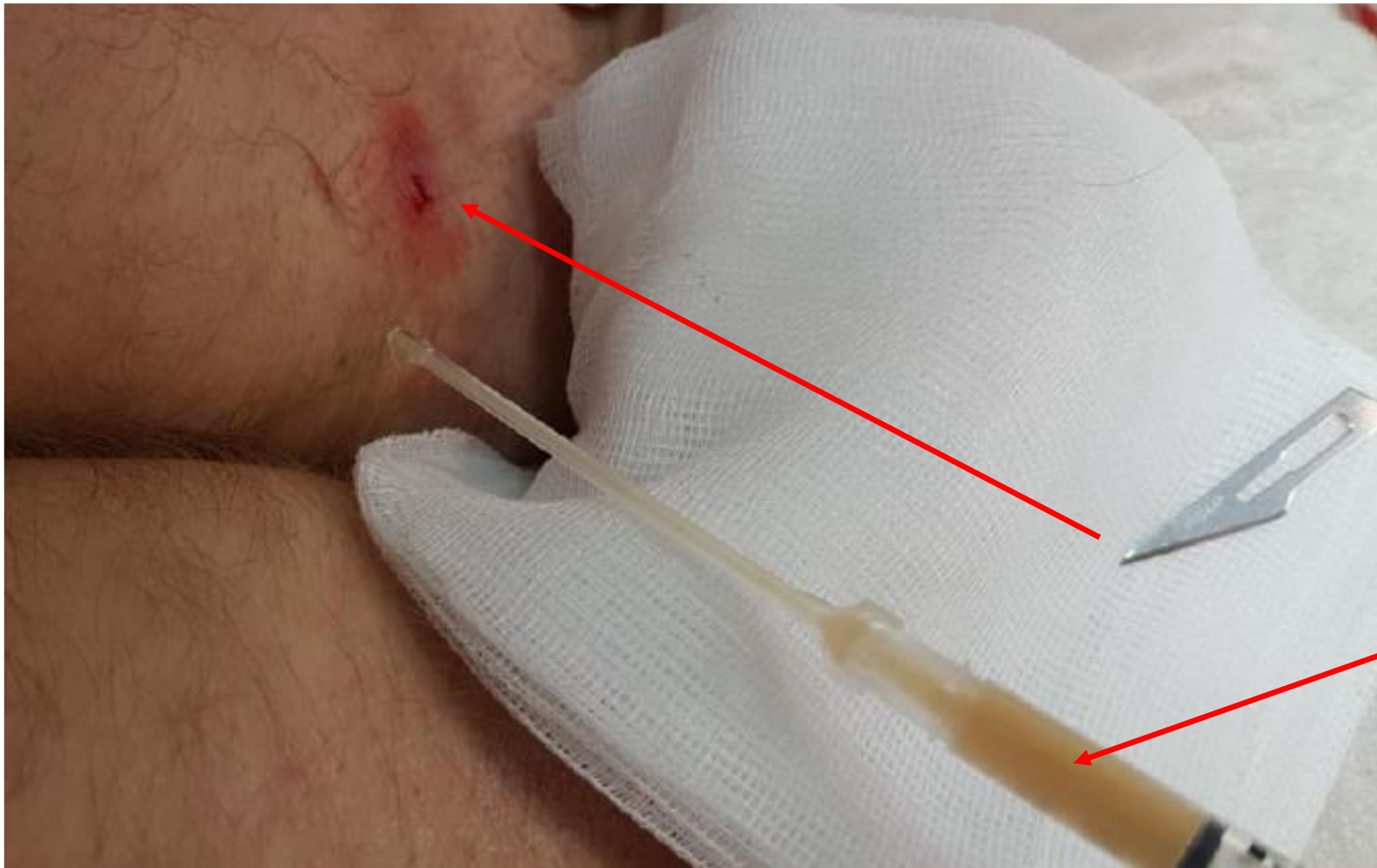


# Treatment of abscesses with injectable honey









Honey









Use of both *Honey* and *Propolis* against wounds.

Synergy effect



## ***PROPOLI***

<http://www.apicolturaonline.it/apiterapia>

Dr Francesco Feraboli

S.M.

Sesso : F . Anni 43. Si punge accidentalmente il 1° dito della mano sinistra con una spina di pesce . Questa è la situazione dopo 7 giorni (Infezione da *Staphylococcus aureus*)



## ***PROPOLI***

Dopo 7 giorni di terapia antibiotica il quadro clinico è nettamente peggiorato ed inizio infiltrazioni locali con propoli alcolica ed impacchi di miele.



Dr Francesco Feraboli

<http://www.apicolturaonline.it/apiterapia>





Photos: Dr. Francesco Feraboli (Italy)

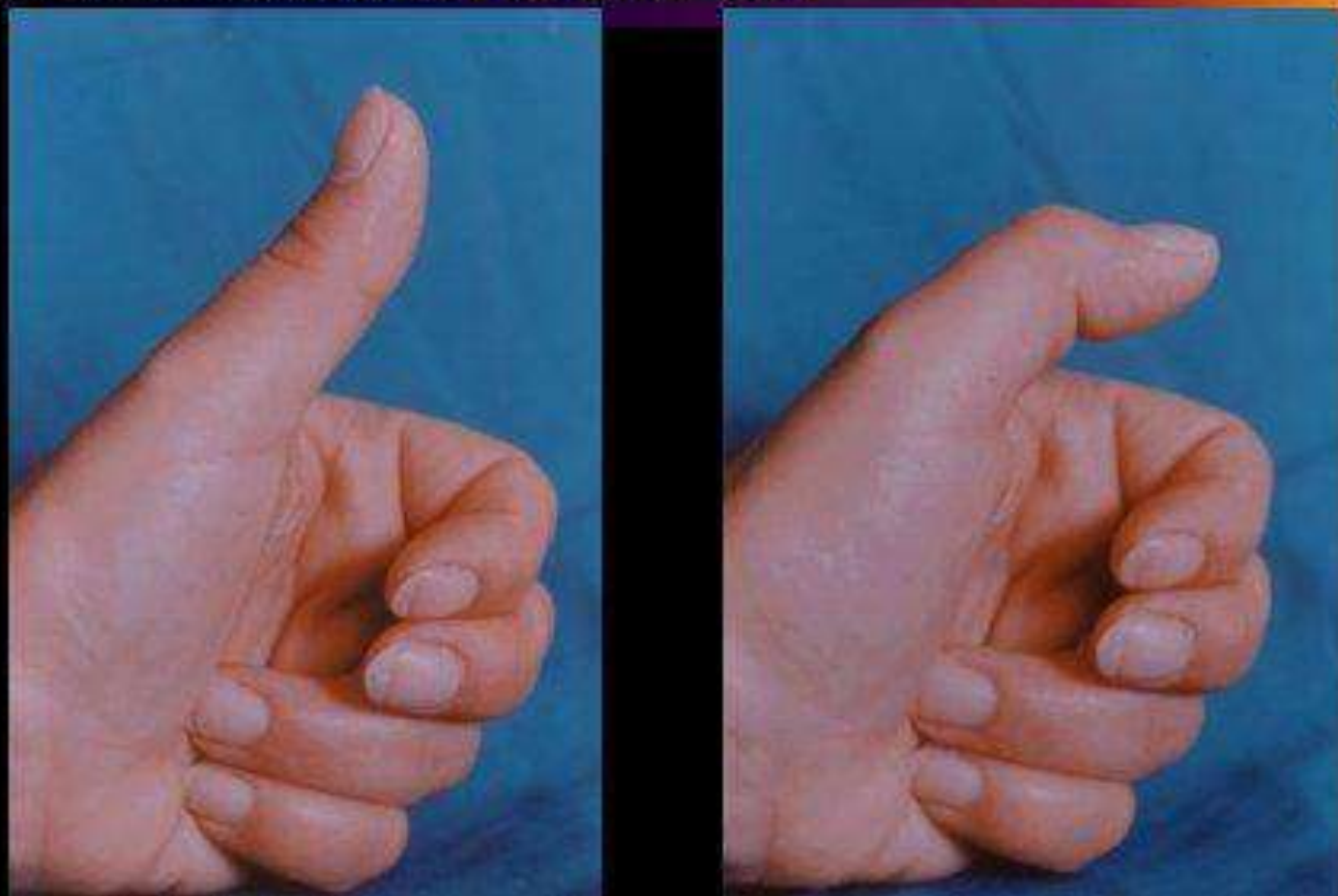


## ***PROPOLI***

<http://www.apicolturaonline.it/apiterapia>

Dr Francesco Feraboli

La lesione è guarita dopo 35 giorni di terapia con propoli e miele.  
Questo è il quadro clinico dopo un anno.





Mr. Abalaru case (Romania)

Honey  
+  
Propolis  
extract  
+  
Thyme oil







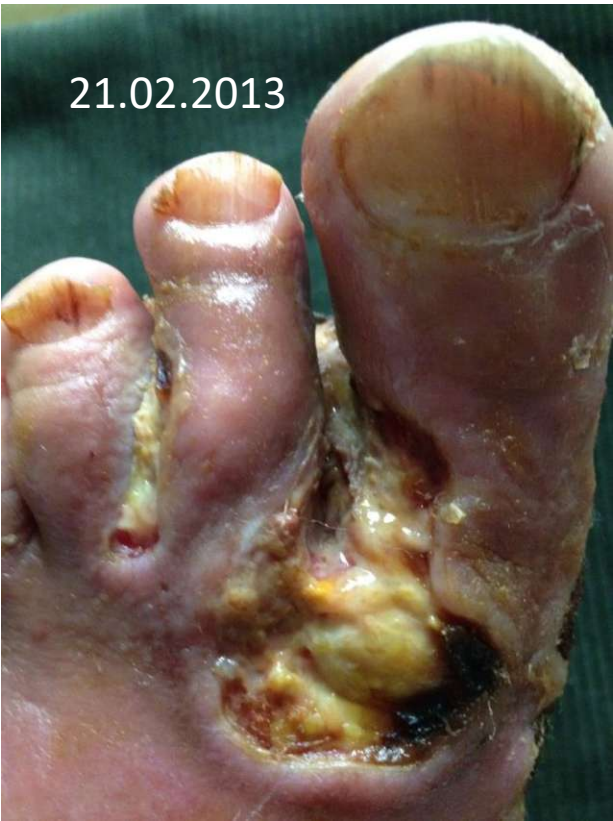
31.01.2013



08.02.2013



12.02.2013



21.02.2013



19.03.2013

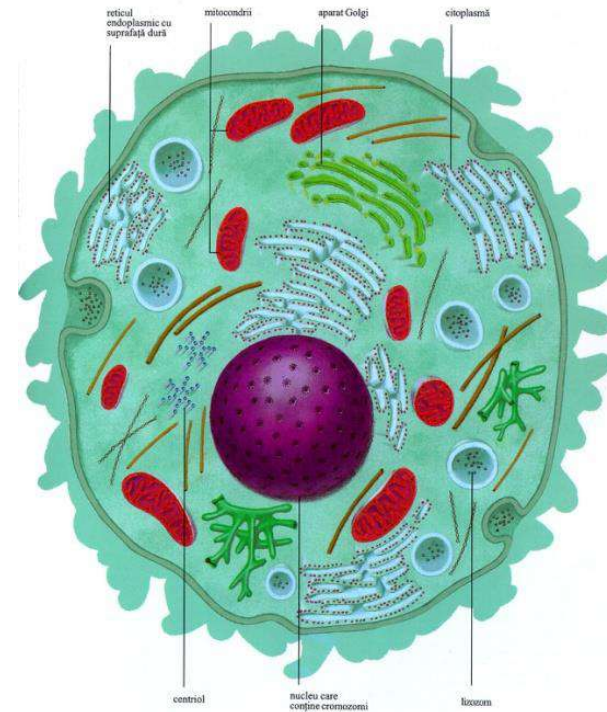


18.04.2013

Before Conclusions...



# What needs a living cell to be-e h-appy?



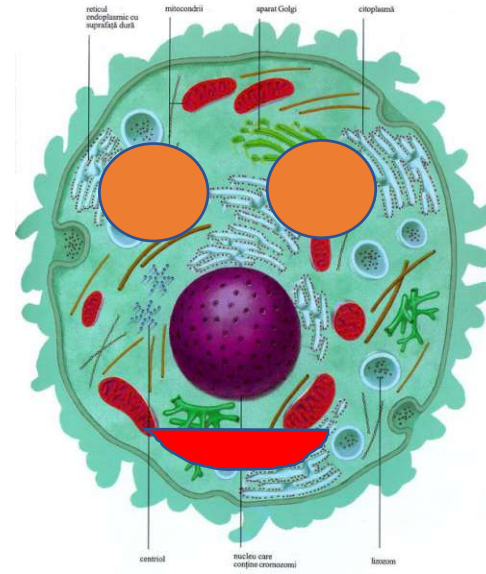
# Information, Coordination, Communication, Interconnectivity, Energy, Activity

Non-stop  
Regeneration/  
Repairs

Hygiene  
Water

Relaxation

Reproduction



Nutrition

Oxygen, Air

Protection

What needs the **skin** to be happy?

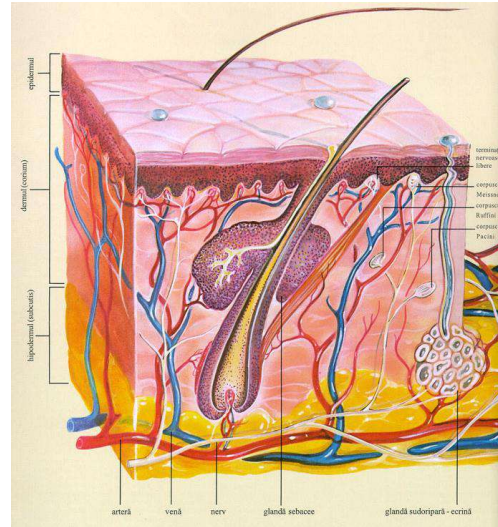
# Information, Coordination, Communication, Interconnectivity, Energy, Activity

# Non-stop Regeneration/ Repairs

# Hygiene Water

# Relaxation

# Reproduction

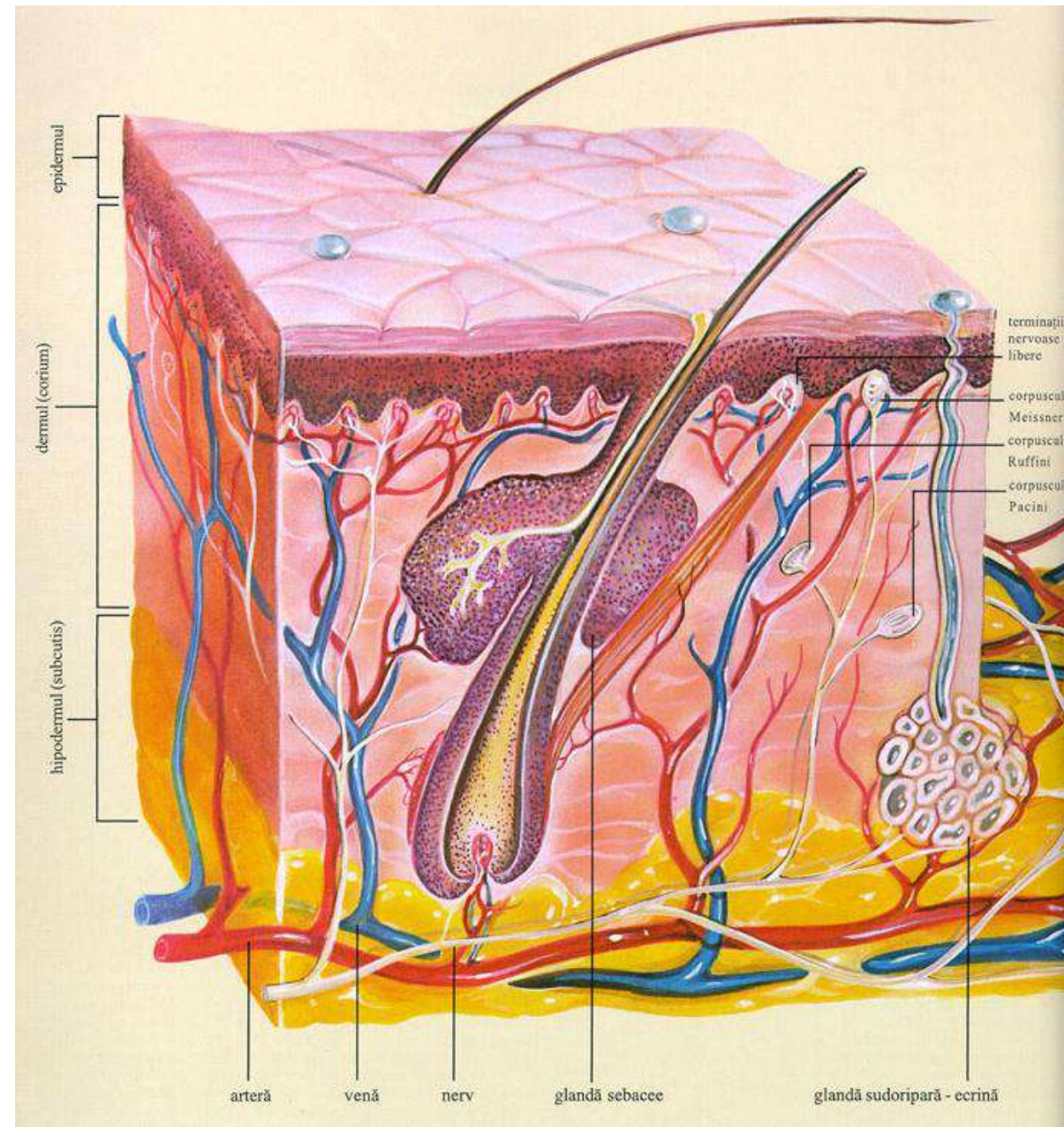


# Nutrition

# Oxygen, Air

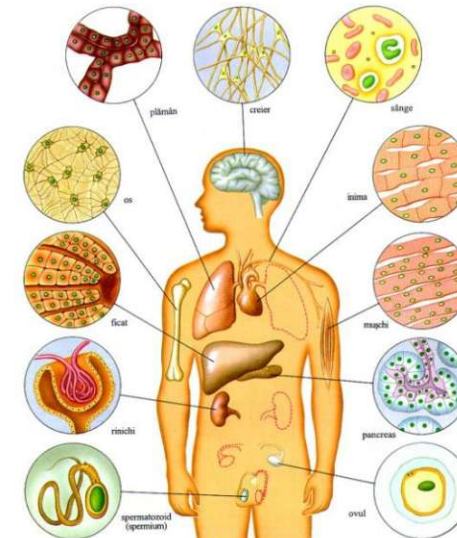
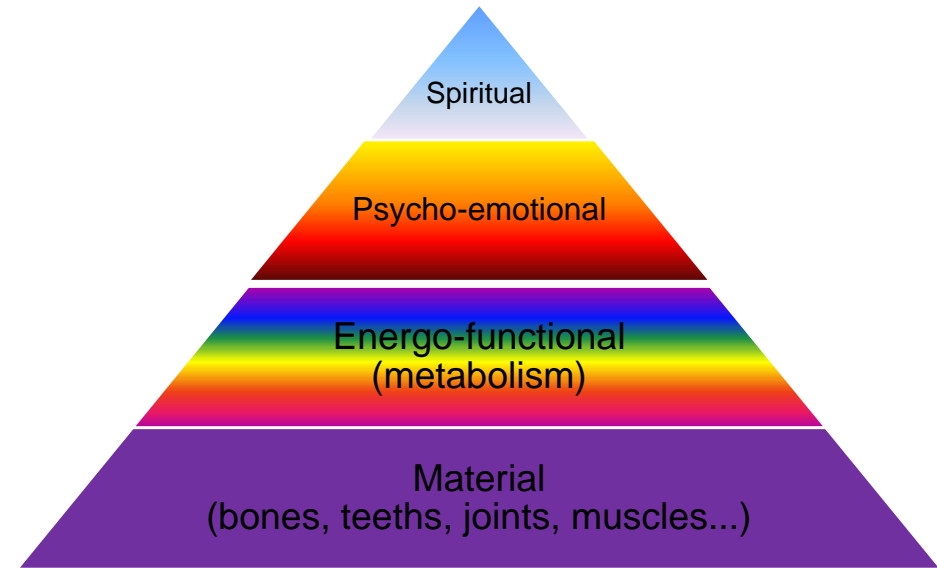
## Protection

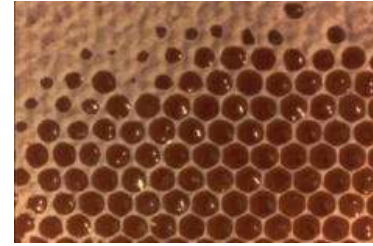
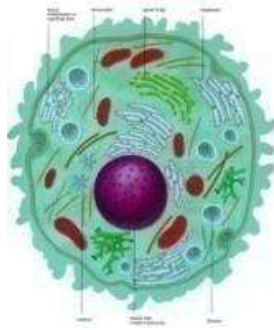




# *Protection* against all kind of life enemies

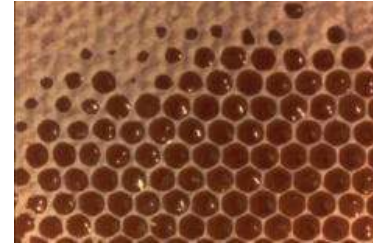
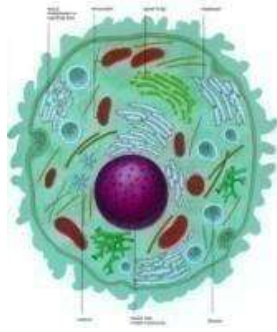
- Best protection should be, generally speaking at all following levels:
  - Material
  - Energetical
  - Informational
- Highly important is the:
  - biophysical
  - biochemical and the
  - biological protection





**Information**

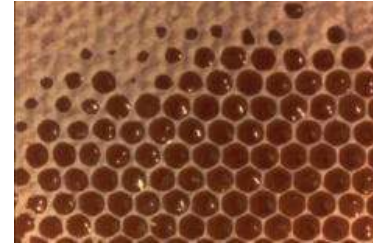
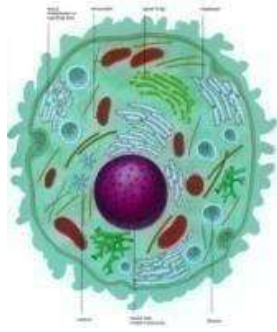
**H. is the best food for the brain/nervous system and for the endocrine and immune systems**



## Hygiene

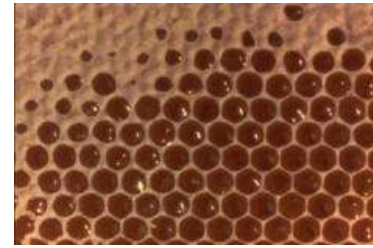
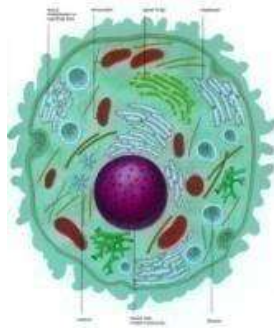
**H. improves the fluidity of the blood and lymph flow + helps the heart, kidney, lungs, skin and liver as detox organs**





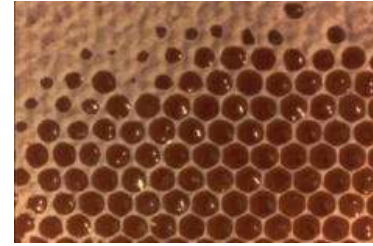
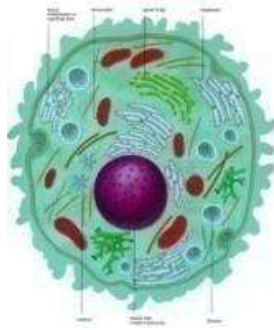
**Functioning,  
Multiplication**

**H. Protects against the DNA damage through its anti-oxydant activity + offer the necessary energy and nutrients during the functioning/multiplication of the cells**



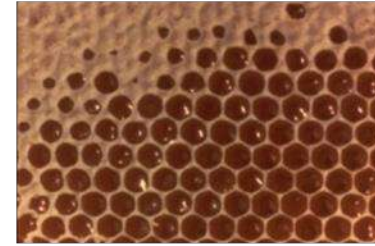
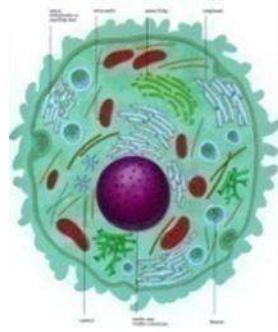
## Oxygen

**H. brings enough energy to all our cells, including to all cells and tissues that belong to the respiratory system + fights anemia (helps the production of red blood cells that carry the O<sub>2</sub>) + helps the respiratory processes inside the cells themselves**



**Protection**

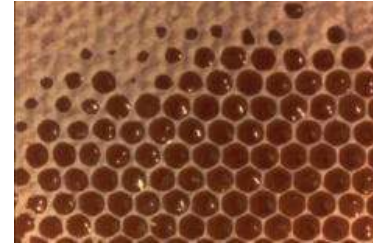
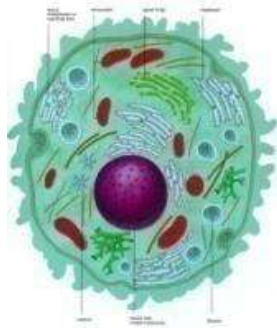
**Due to the content in  
poliphenols, organic acids,  
enzymes, peptides and  
minerals**



## **Nutrients**

**H. offers thousands of different nutrients and micro-nutrients necessary for the good functioning of the cells, especially when combined with all other bee products**





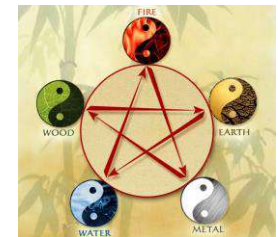
**Water**

**Honey contains up to 20-23% water. The carbohydrates from H. generates endogene water after being metabolized**

# Conclusions

# 5 Golden rules necessary to get a **fast healing** of wounds with **Honey** and **Propolis**

1. Get the exact and detailed ***diagnosis*** of all causes of the causes of that *kind* of wound in that *specific* case



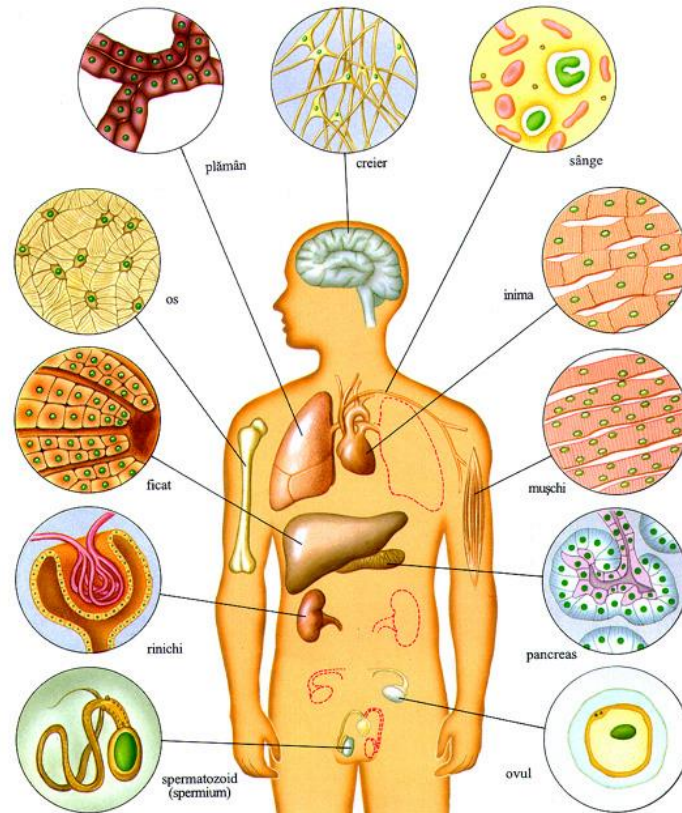


2. Find the best **kind** of honey and propolis that best fits with the specific needs of the patient.

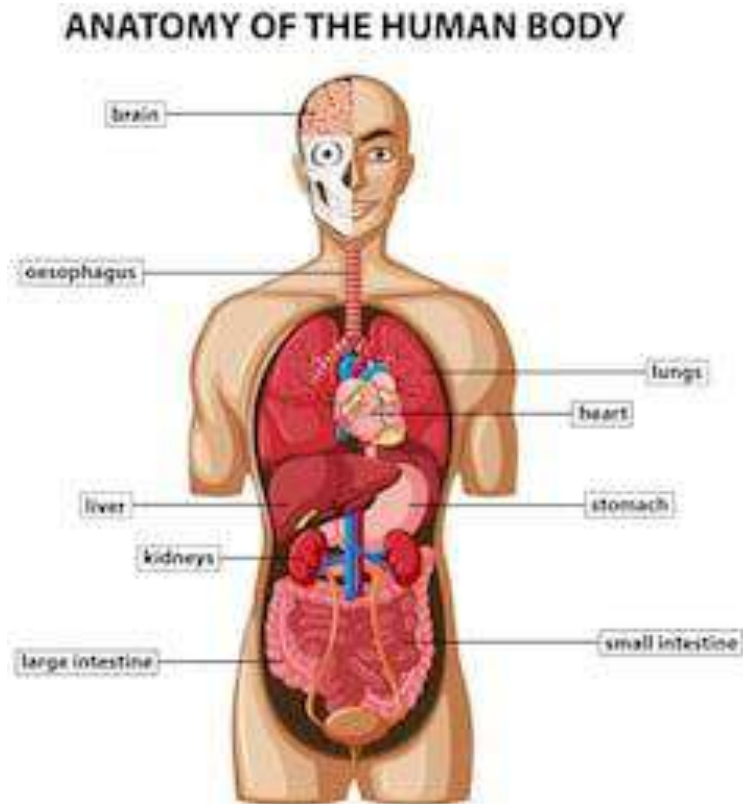
A good knowledge of the *geobotanical origin* and proven by local scientists *pharmacologic effects* is highly important



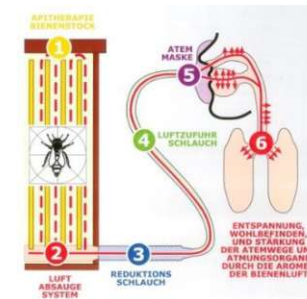
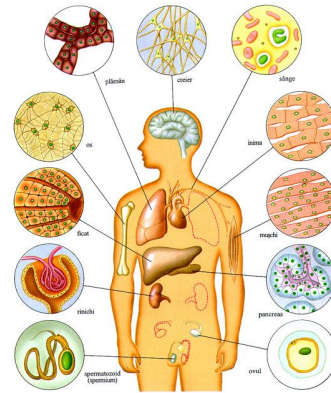
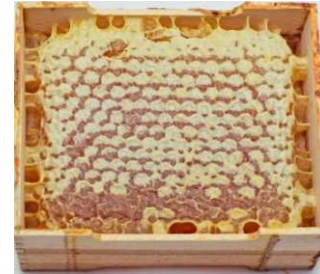
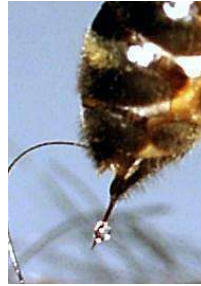
3. Use honey and propolis not only locally, topically, on the wound, but **take care of *all* cells**, tissues, organs and systems from the body



4. Administer the honey and propolis through *all anatomical ways*, including through inhalations/nebulization, intravenous, suppositories, etc.



5. Use *all beehive products*, including bee venom, bee pollen, royal jelly, to get an overall, systemic improvement of the functioning of the whole body



More Information on this topic?



Join Canadian Apitherapy Association at:  
<https://www.canadian-apitherapy-association.org/>

Join Apimondia and its Apimedica Symposiums:

[www.Apimondia.org](http://www.Apimondia.org)

Join your local/regional/national Apitherapy  
Association:

see a list of them in „Addresses” in  
[www.Apitherapy.com](http://www.Apitherapy.com)

Join the International Federation of  
Apitherapy:

[www.Api-Terra.org](http://www.Api-Terra.org)



Join the next International Apitherapy events:

**Romania:** October 11-14, 2019

[www.Apiterapie.ro](http://www.Apiterapie.ro)

**China (Shanxi):** November 22-24, 2019

For any question, comment or proposal of  
**international cooperation,**  
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**Thank you/Merci Canada!**

**Thank you all!!**